

Austropeltum glareosum

COMMON NAME

gritty peat pelt lichen

FAMILY

Sphaerophoraceae

AUTHORITY

Austropeltum glareosum Henssen

FLORA CATEGORY

Lichen – Native

ENDEMIC TAXON

No

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Lichens - Squamulose

CURRENT CONSERVATION STATUS

2018 | Threatened – Nationally Vulnerable | Qualifiers: DP, TO

BRIEF DESCRIPTION

Characterised by the conspicuous olive-brown, rather leathery, squamulose thallus bearing marginal, lecideine, black, ±glomerulate apothecia. Characteristic anatomical features include the thick, heavily gelatinised and gradually decaying upper cortex; the pseudopodetiate apothecia with a boundary tissue and secondarily divided hymenium and subhymenium; and pycnidia with a thalline cortex that breaks up into a channel when the filiform conidia are released.

DISTRIBUTION

South Island: Nelson (near Fenella Hut Cobb Valley, Denniston & Stockton Plateaux, Mt Rochfort, Mt Augusta), Southland (West Dome). Recently discovered in Arthur's Pass National Park (Hutchison 2020). Also in Tasmania.

HABITAT

In open, exposed often inundated quartzite sand or peaty soils, 750–900 m, associating with species of *Cladia* and *Cladonia*, *Neophyllis melacarpa*, *Pycnothelia caliginosa*, *Parasiphula foliacea*, *P. fragilis*, *P. jamesii* and *Siphula decumbens*. A prominent element in the vegetation on these exposed, windswept tablelands, offering considerable resistance to surface soil erosion.



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Denniston Plateau, West Coast. Photographer: Melissa Hutchison, Date taken: 04/06/2022, Licence: CC BY-NC.

DETAILED DESCRIPTION

Thallus squamulose to subfoliose, spreading in patches 5–10 cm diam., terricolous. **Lobes** 4–12(–15) mm diam., dispersed to contiguous and imbricate, flat, peltate and ±convex, or shell-like with raised margins, attached by a central holdfast and additional tufts of rhizohyphae. **Upper surface** olive-brown to blackened, dull or glossy, smooth, undulate to unevenly wrinkled, becoming fissured with age. **Lower surface** brownish, naked or occasionally indistinctly veined. **Apothecia** marginal, shortly stalked, black, dull or glossy, up to 5 mm diam., globose at first, becoming convoluted and glomerulate with age. Hymenium 50–80 µm tall with a grey-black to blackish brown epithecium. Subhymenium dark-brown in upper part, 450–480 µm tall when young, to 1600–2000 µm and deeply divided in stalks when mature; boundary tissue ranging from 45 to 160 µm thick. **Ascospores** fusiform, (9–)11–16 × 3– 4.5 µm. **Pycnidia** marginal, black, ±globose to 0.5 mm diam. Conidia filiform, curved, 32–62 × 0.6 µm.

Chemistry: TLC–, all reactions negative.

THREATS

The sandstone pavements it occupies on the Denniston and Stockton Plateaux are threatened by coal mining.

SUBSTRATE

Terricolous (ground)

ATTRIBUTION

Fact sheet prepared by Melissa Hutchison (25 August 2021). Brief description, Distribution, Habitat, Features, and Similar taxa 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.

Henssen H., Doring A. and Kantvilas G. 1992: *Austropeltum glareosum* gen. et sp. nov., a new lichen from Mountain Plateaux in Tasmania and New Zealand. *Bot. Acta* 105: 457–467.

Hutchison M. 2020: Observation of *Austropeltum glareosum* on the iNaturalist website.

<https://inaturalist.nz/observations/48323738>.

MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/austropeltum-glareosum/>