# **Aptrootia elatior**

# **SYNONYMS**

Anthracothecium monosporum Müll.Arg., Ascidium elatius Stirt., Ascidium melanosporum C.Knight, Laurera elatior (Stirt.) D.J.Galloway, Polyblastiopsis monosporum (Müll.Arg.) Upreti & Ajay Singh

# **FAMILY**

Trypetheliaceae

### **AUTHORITY**

Aptrootia elatior (Stirt.) Aptroot

# **FLORA CATEGORY**

Lichen - Native

# **ENDEMIC TAXON**

Nο

## **ENDEMIC GENUS**

Νo

### **ENDEMIC FAMILY**

Nο

### STRUCTURAL CLASS

Lichens - Crustose

### **CURRENT CONSERVATION STATUS**

2018 | At Risk - Naturally Uncommon | Qualifiers: SO, Sp

# **BRIEF DESCRIPTION**

Characterised by the corticolous habit; the olive-greenish to fawnish, nodular-papillate thallus; perithecia in prominent, hemispherical, monocarpic thalline verrucae; and large, dark red-brown, densely muriform ascospores, 230–330  $\times$  60–90  $\mu m$ , that are often visible as tiny black rods on the outside of the thallus near the perithecia (×10 lens).

# **DISTRIBUTION**

North Island: Auckland (Waitakere Ranges) to Wellington. South Island: Nelson, Maruia Valley, Calf Paddock near Springs Junction, Otago (Mt Cargill). Chatham Islands: Rekohu / Wharekauri / Chatham Island.

Still very much under-collected in New Zealand. Probably more widely distributed.

Known also in Australia (McCarthy & Kantvilas 1993; McCarthy 2003, 2006).

# DEN ZEALAND YEAR ONLY



Saxicolous on coastal rock, Whangārei Heads Northland. Photographer: Marley Ford, Date taken: 27/01/2024, Licence: CC BY.



Saxicolous on coastal rock, Whangārei Heads Northland. Photographer: Marley Ford, Date taken: 27/01/2024, Licence: CC BY.

# **HABITAT**

On bark of forest trees, *Dacrydium cupressinum*, *Dysoxylum spectabile*, *Myrsine australis*, *Fuscospora fusca*, *F. solandri*, *Rhopalostylis sapida* and rarely on coastal rocks (Waitakere Ranges; Bartlett 1988: 12).

## **DETAILED DESCRIPTION**

**Thallus** crustose, spreading in irregular patches, 2-8(-10) cm diam., pale olive greenish, yellowish-fawn, pale yellow or grey-yellow to glaucous brown, nodular-papillate in humps or concrescent lumps, 0.3-1.2 mm diam., ± glebose, minutely white-papillate, thick, shining or dull. **Perithecia** often densely crowded in prominent hemispherical thalline verrucae, monocarpic, 0.4-1.5 mm diam., apical pore black, indented to 0.2 or 0.3 mm diam. **Excipulum** carbonised, red-brown. **Paraphyses** colourless, branched-reticulate. **Ascospores** very large 1, occasionally 2 per ascus, encased inside a gelatinous sac which is extruded with the ascospores, which becomes dark red-brown with age, densely muriform, wall of two distinct layers, 230-330 mm × 60-90 μm.

### **SIMILAR TAXA**

The ascospores darken in the ascus, unlike many colourless ascospores of Trypetheliaceae and lichens that only become brown after their release from perithecia (Harris 1986). The Tasmanian terricolous species *Laurera robusta* McCarthy & Kantvilas, has large, dark-brown, muriform ascospores that darken in the ascus before release (McCarthy & Kantvilas 1993).

# **SUBSTRATE**

Corticolous

### **ETYMOLOGY**

aptrootia: Named after Dutch lichenologist and mycologist André Aptroot

### **ATTRIBUTION**

Fact sheet prepared by Melissa Hutchison (29 November 2023). Brief description, Distribution, Habitat, Features, and Similar taxa sections copied from Galloway (1985, 2007).

# REFERENCES AND FURTHER READING

Bartlett J.K. 1988: Lichens of the Waitakere Range. Auckland Botanical Society Bulletin 17: 1-29.

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.

Harris R.C. 1986 ["1984"]: The family Trypetheliaceae (Loculoascomycetes: lichenized Melanommatales) in Amazonian Brazil. *Acta Amazonica, Supplement 14*: 55-80.

McCarthy P.M. 2003c: Catalogue of Australian lichens. Flora of Australia Supplementary Series 19: 1-237.

McCarthy P.M. 2006: Checklist of the lichens of Australia and its island territories. Australian Biological Resources Study, Canberra. Version 29 March 2006. http://www.anbg.gov.au/abrs/lichenlist/introduction.html McCarthy P.M. (ed.) 2009: Flora of Australia. Vol. 57 Lichens 5. ABRS, Canberra.

McCarthy P.M. and Kantvilas G. 1993: *Laurera robusta* (Trypetheliaceae), a new alpine lichen from Tasmania. *Lichenologist 25*: 51–55.

# NZPCN FACT SHEET CITATION

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# **MORE INFORMATION**

https://www.nzpcn.org.nz/flora/species/aptrootia-elatior/