Topelia rosea

SYNONYMS

Microglaena rosea Servít

FAMILY

Graphidaceae

AUTHORITY

Topelia rosea (Servít) P.M.Jørg. & Vězda

FLORA CATEGORY

Lichen - Native

ENDEMIC TAXON

No

ENDEMIC GENUS

Nο

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Lichens - Crustose

CURRENT CONSERVATION STATUS

2018 | Data Deficient | Qualifiers: OL, SO

BRIEF DESCRIPTION

Characterised by the saxicolous (basicolous) habit; the thin, pale-brownish grey thallus; numerous semi-immersed perithecia; and thin-walled, hyaline, muriform ascospores, $19-27.5 \times 11.5-17 \ \mu m$.

DISTRIBUTION

South Island: Nelson (Kaihoka Lakes). First record for New Zealand and Southern Hemisphere from a collection of the late John Bartlett – [AK 193118] (McCarthy 1993:12). **Chatham Islands**: Recently recorded from the Chatham Islands/Rēkohu (de Lange 2023).

Cosmopolitan. Known also from Italy and Greece (Jørgensen & Vězda 1984; Nimis 1993) and from Lord Howe Island (McCarthy 2003, 2006).

HABITAT

On calcareous sandstone. On the Chatham Islands/Rēkohu it was described as abundant on undifferentiated Te Whanga limestone and "confined to semi-shaded and shaded rock exposures under a dense canopy of inihina (*Melicytus chathamicus*) and taupata (*Coprosma repens*) (de Lange 2023).





Topelia rosea in situ on shaded, undifferentiated Te Whanga Limestone, Motuhinahina Island, Te Whanga, Rekohu / Wharekauri / Chatham Island. Photographer: Peter J. de Lange, Date taken: 18/04/2023, Licence: CC BY.



Topelia rosea in situ on shaded, undifferentiated Te Whanga Limestone, Motuhinahina Island, Te Whanga, Rekohu / Wharekauri / Chatham Island - note pinkish grey colour when fresh. Photographer: Peter J. de Lange, Date taken: 18/04/2023, Licence: CC BY.

DETAILED DESCRIPTION

Thallus 60-120 μ m thick, dull, uneven, pale brownish grey, richly cracked, saxicolous. **Perithecia** numerous, 0.4–0.6 mm diam., semi-immersed, largely overgrown by **thallus**. A thick, pale involucrellum usually protrudes, while at the centre of the plane to subconcave apex is a pinkish grey to dark grey-brown ostiole that is ringed internally with short, stiff periphyses. **Paraphyses** unbranched. **Hymenium** I+ blue-green. **Exciple** c. 30 μ m thick towards apex and 50–70 μ m thick at base. **Asci** fissitunicate, 140–170 × 16–21 μ m, 8-spored. **Ascospores** uniseriate, hyaline, thin-walled, ellipsoidal to subglobose, muriform, 19–27.5 × 11.5–17 μ m.

SUBSTRATE

Saxicolous (calcareous rocks)

Chemistry: TLC negative.

Only one species of *Topelia* is known from New Zealand; the first record of the genus in the Southern Hemisphere (McCarthy 1993).

ATTRIBUTION

Fact sheet prepared by Melissa Hutchison (14 June 2023). Brief description, Distribution, Habitat, Features, and Extra information sections copied from Galloway (2007).

REFERENCES AND FURTHER READING

de Lange P.J. 2023: iNaturalist observation. https://inaturalist.nz/observations/159000695. Date accessed: 14 June 2023.

Galloway D.J. 2007: Flora of New Zealand: Lichens, including lichen-forming and lichenicolous fungi. 2nd edition. Lincoln, Manaaki Whenua Press. 2261 pp.

Jørgensen P.M.; Vězda A. 1984: *Topelia*, a new Mediterranean lichen genus. *Beiheft zur Nova Hedwigia 79*: 501-510. McCarthy P.M. 1993: Additional lichen records from New Zealand. 9 *Porina sylvatica* and *Topelina* [sic] *rosea*. *Australasian Lichenological Newsletter 33*: 12-13.

McCarthy P.M. 2003: 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
Nimis P.L. 1993: *The lichens of Italy. An annotated catalogue*. Museo Regionale di Scienze Naturali, Torino. Monografia *XII*: 1-897.

MORE INFORMATION

https://www.nzpcn.org.nz/flora/species/topelia-rosea/