# Frullania toropuku

# **COMMON NAME**

Liverwort

### **SYNONYMS**

None. First described in 2013

### **FAMILY**

Frullaniaceae

#### **AUTHORITY**

Frullania toropuku von Konrat, de Lange et Larrain

### **FLORA CATEGORY**

Non-vascular - Native

### **ENDEMIC TAXON**

Yes

# **ENDEMIC GENUS**

Nο

### **ENDEMIC FAMILY**

Nο

# **CURRENT CONSERVATION STATUS**

2013 | Data Deficient

### **BRIEF DESCRIPTION**

Minute reddish-brown, monoicous foliose liverwort; perianth plicate, 3 major keels + 2–3 supplementary keels, the perianth surface conspicuously ornamented, bullate; the first branch leaf (BL1) of a Frullania-type branch often reduced in size and atypical of the normal stem leaves, with all three segments explanate or at most sulcate, and leaves characteristic of the main stem not developing until either BL2, BL3 or BL4

# **DISTRIBUTION**

Endemic. New Zealand: North and Stewart Islands - known from North Cape (Surville Cliffs), Little Barrier Island, Table Mountain, and from Stewart Island (Paterson Inlet)

### **HABITAT**

Variably - has been collected from serpentinite rock and associated saprolite in a small forest remnant; also from the trunks of trees in cloud forest, and from tree trunks in coastal forest.

### **FLOWERING**

Not Applicable - species reproduces by spores

# **FRUITING**

Unknown - the four collections are all fruiting and these were made between October and February

# LIFE CYCLE

Capsules are water and possibly also wind dispersed (Thorsen et al., 2009).

### **THREATS**

Probably not threatened, and probably will prove to be a naturally uncommon, biologically sparse species. However, at this stage there is insufficient information to make adefinitive assessment, and this is why *Frullania toropuku* is listed as 'Data Deficient'. *Frullania toropuku* is part of the *F. rostrata* complex, it is minute, and very hard to recognise in the field - this makes surveying for it difficult, and os it may well be that determining an accurate conservation status will prove impractical.

# **ATTRIBUTION**

Fact sheet prepared for NZPCN by P.J. de Lange 29 January 2013. Description adapted from von Konrat et al. (2013).



### REFERENCES AND FURTHER READING

Von Konrat, M.; de Lange, P.; Larraín, J.; Hentschel, J.; Carter, B.; Shaw, J.; Shaw, B. 2013. A small world: uncovering hidden diversity in *Frullania* – a new species from Aotearoa-New Zealand. *Polish Journal of Botany 58*: 437–447. DOI: 10.2478/pbj-2013-0056

Thorsen, M. J.; Dickinson, K. J. M.; Seddon, P. J. 2009. Seed dispersal systems in the New Zealand flora. Perspectives in Plant Ecology, Evolution and Systematics 2009 Vol. 11 No. 4 pp. 285-309

# NZPCN FACT SHEET CITATION

Please cite as: de Lange, P.J. (Year at time of access): Frullania toropuku Fact Sheet (content continuously updated). New Zealand Plant Conservation Network. <a href="https://www.nzpcn.org.nz/flora/species/frullania-toropuku/">https://www.nzpcn.org.nz/flora/species/frullania-toropuku/</a> (Date website was queried)

# **MORE INFORMATION**

https://www.nzpcn.org.nz/flora/species/frullania-toropuku/