# Tmesipteris horomaka

## **Common Name(s):**

Banks Peninsula fork fern

### **Current Threat Status (2012):**

**Nationally Critical** 

### **Distribution:**

Endemic, New Zealand: South Island, Banks Peninsula

### **Habitat:**

An epiphyte mostly found on the trunks of the tree ferns ponga (Cyathea dealbata), Smith's tree fern (C. smithii) and wheki (Dicksonia squarrosa) within enclosed forest. It has also been collected once within the rich peaty soil produced by a species of harakeke/flax (Phormium sp.) growing on a cliff face.

#### Features\*:

Epiphytic or rarely terrestrial plants. Aerial stems pendulous, 70-510 mm long, not known to branch within the leafy part of the stem. Leaves spirally arranged, narrowly oblong to narrowly ovate, linear to falcate(-sigmoid),  $10-25 \times 2.5-6.5$  mm; apex emarginate, truncate or cuspidate, with mucro 1-2 mm long. Synangia  $2.5-6 \times 1-2$  mm, rounded to slightly biconic, with the lower surface of the sporangia appressed along all or most of their length to the subtending leaf margin, and points where present projecting laterally. Spores  $71-83 \times 35-39$  microns. Description adapted from Perrie et al. (2010).

# Flowering: Fruiting:

Not applicable - spore producing

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## **Threats:**

Currently known from 11 sites and an estimated c.75 plants based on the eight populations visited by Perrie et al. (2010). Therefore Tmesipteris horomaka easily qualifies for Threatened/Nationally Critical as there are less 250 mature individuals known. On the advice of Leon Perrie Tmesipteris horomaka had already been listed as Nationally Critical by de Lange et al. (2009) under the name Tmesipteris aff. tannensis (CHR 496779; Banks Peninsula).

### \*Attribution:

Fact sheet prepared for the NZPCN by P.J. de Lange (5 May 2010).

# References and further reading:

de Lange, P.J.; Norton, D.A.; Courtney, S.P.; Heenan, P.B.; Barkla, J.W.; Cameron, E.K.; Hitchmough, R.; Townsend, A.J. 2009: Threatened and uncommon plants New Zealand Journal of Botany 47: 61–96.

Perrie, L.R.; Brownsey, P.J.; Lovis, J.D. 2010: Tmesipteris horomaka, a new octoploid species from Banks Peninsula. New Zealand Journal of Botany 48: 15-29.

Townsend, A.J.; de Lange, P.J.; Norton, D.A.; Molloy, J.; Miskelly, C.; Duffy, C. 2008: The New Zealand Threat Classification System manual. Wellington, Department of Conservation.

#### For more information, visit:

http://nzpcn.org.nz/flora\_details.asp?ID=6656