

# Hymenophyllum sanguinolentum

## COMMON NAME

filmy fern, piripiri

## SYNONYMS

Mecodium sanguinolentum (G. Forst.) C. Presl; Trichomanes sanguinolentum G.Forst.; Hymenophyllum polyanthos var. sanguinolentum (G.Forst.) Hook. ex Hook.f.; Hymenophyllum sanguinolentum var. lophocarpum (Colenso) Domin; Hymenophyllum polyanthos sensu Raoul; Sphaerocionium sanguinolentum (G.Forst.) C.Presl; Hymenophyllum cristulatum Rosenst.; Hymenophyllum lophocarpum Colenso

## FAMILY

Hymenophyllaceae

## AUTHORITY

Hymenophyllum sanguinolentum (G. Forst.) Sw.

## FLORA CATEGORY

Vascular – Native

## ENDEMIC TAXON

No

## ENDEMIC GENUS

No

## ENDEMIC FAMILY

No

## STRUCTURAL CLASS

Ferns

## NVS CODE

HYMSAN

## CHROMOSOME NUMBER

$2n = 72$

## CURRENT CONSERVATION STATUS

2017 | Not Threatened | Qualifiers: TO

## PREVIOUS CONSERVATION STATUSES

2012 | Not Threatened

2009 | Not Threatened

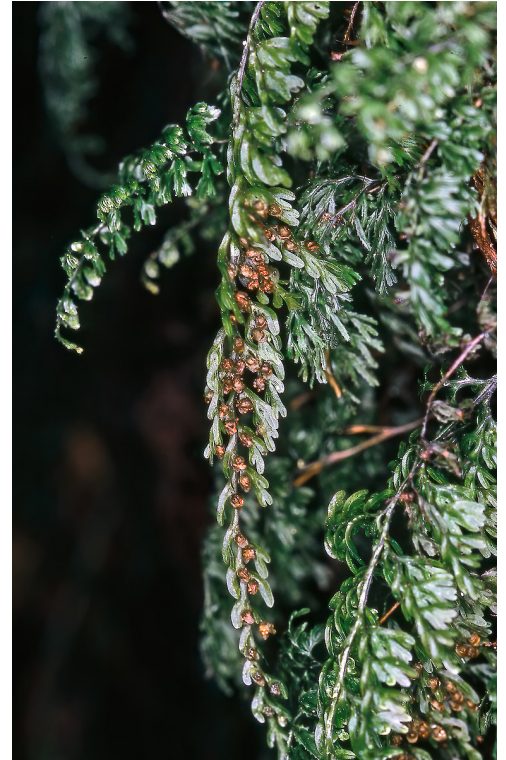
2004 | Not Threatened

## DISTRIBUTION

Indigenous. New Zealand; Manawatāwhi / Three Kings Islands, North Island, South Island, Stewart Island/Rakiura. Also Cook Islands (Rarotonga). Previously regarded as endemic to New Zealand, *Hymenophyllum sanguinolentum* was discovered on Rarotonga in July 2010.

## HABITAT

Coastal to subalpine. A very common and widespread species of closed or open forest and shrub-land. Also a common species of shaded canyon walls, cliff faces, rock tors, boulder-field and talus slopes. *Hymenophyllum sanguinolentum* is extremely drought resistant and as such one of the few filmy ferns to grow within drought-prone habitats.



Stokes Valley, Lower Hutt. Photographer: Jeremy R. Rolfe, Date taken: 10/08/2002, Licence: CC BY.



Tararua Forest Park. Photographer: Jeremy R. Rolfe, Date taken: 19/06/2005, Licence: CC BY.

## DETAILED DESCRIPTION

Terrestrial or epiphytic fern forming dense patches on suitable substrates. **Rhizomes** long-creeping, slender. **Frond** dark green, strongly aromatic, scent somewhat sanguinely metallic (especially when dry). **Stipes** 20–90 mm long, slender; stipes and rachises sparsely hairy especially toward and at base, narrowly winged for most of length, black, wing often zig-zagged in upper portion. **Laminae** 50–250–(300) × 30–120 mm, ovate, elliptic to elliptic-deltoid, 3–4-pinnate, glabrescent. **Ultimate segments** 8–12 mm wide, oblong, margins entire though often slightly undulose toward distal portion of frond. **Sori** on short branches in distal portion of frond, many borne on each primary pinna. **Indusium** ovoid to ovoid-elliptic, abaxially crested by 3–(5) longitudinal ridges; indusial flaps entire. **Receptacle** included.

## SIMILAR TAXA

Easily distinguished when fertile by the crest backs of the indusium. **Sterile** material can be recognised by the black zig-zagged rachis wing and smooth pinna margins. Sodden or dried material smells strongly like dried blood (or, as some people sense it, like wet rusted iron). Pressed specimens stain paper yellow-brown or dark brown.

*Hymenophyllum sanguinolentum* is very similar to *H. villosum*. *Hymenophyllum villosum* is restricted to upper montane and subalpine habitats but it may be found growing with *H. sanguinolentum*. From that species *H. villosum* differs by its hairy lamina and ellipsoid indusia whose abaxial surfaces are smooth, never crested like those of *H. sanguinolentum*.

## LIFE CYCLE

Minute spores are wind dispersed (Thorsen et al., 2009).

## PROPAGATION TECHNIQUE

Difficult—should not be removed from the wild

## ETYMOLOGY

**hymenophyllum**: Membranous leaf, from the Greek humen and phullon

**sanguinolentum**: Smelling like blood; from the Latin sanguis and olere; fern's smell especially when dried

## WHERE TO BUY

Not commercially available.

## ATTRIBUTION

Fact sheet prepared for NZPCN by P.J. de Lange (21 April 2011). Description adapted from Brownsey & Smith-Dodsworth (2000).

## REFERENCES AND FURTHER READING

Brownsey PJ, Smith-Dodsworth JC. 2000. New Zealand Ferns and Allied Plants. David Bateman, Auckland, NZ. 168 p.

Thorsen MJ, Dickinson KJM, Seddon PJ. 2009. Seed dispersal systems in the New Zealand flora. *Perspectives in Plant Ecology, Evolution and Systematics* 11: 285–309. <https://doi.org/10.1016/j.ppees.2009.06.001>.

## NZPCN FACT SHEET CITATION

Please cite as: de Lange, P.J. (Year at time of access): *Hymenophyllum sanguinolentum* Fact Sheet (content continuously updated). New Zealand Plant Conservation Network.

<https://www.nzpcn.org.nz/flora/species/hymenophyllum-sanguinolentum/> (Date website was queried)

## MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/hymenophyllum-sanguinolentum/>