

# Hymenophyllum bivalve

## COMMON NAME

filmy fern

## SYNONYMS

Meringium bivalve (G. Forst.) Copel.; Sphaerocionium bivalve (G.Forst.)  
C.Presl; Trichomanes bivalve G.Forst.; Hymenophyllum pyriforme Bosch;  
Hymenophyllum spathulatum Colenso

## FAMILY

Hymenophyllaceae

## AUTHORITY

Hymenophyllum bivalve (G. Forst.) Sw.

## FLORA CATEGORY

Vascular – Native

## ENDEMIC TAXON

No

## ENDEMIC GENUS

No

## ENDEMIC FAMILY

No

## STRUCTURAL CLASS

Ferns

## NVS CODE

HYMBIV

## CHROMOSOME NUMBER

2n = 44

## CURRENT CONSERVATION STATUS

2012 | Not Threatened

## PREVIOUS CONSERVATION STATUSES

2009 | Not Threatened

2004 | Not Threatened

## DISTRIBUTION

Indigenous. New Zealand: North, South, Stewart, Chatham and Auckland Islands. From Campbells Bay (Auckland) south, though scarce north of the Waikato. Also Australia (Queensland to New South Wales)

## HABITAT

Coastal to montane forest. Either terrestrial or a low epiphyte on tree trunks and exposed roots.



Waikaremoana, October. Photographer: John Smith-Dodsworth



Waikaremoana, October. Photographer: John Smith-Dodsworth

## FEATURES

Delicate, mat-forming terrestrial or low epiphytic fern. Rhizomes long-creeping, rather gracile, wiry, pliant, sparsely hairy; hairs dark brown, appressed. Frond pendulous in epiphytic plants otherwise with erect stipes and laminae lying horizontal. Stipes well spaced on rhizomes, 30-150(-180) mm long, slender, not-winged ± glabrous (sometimes with sparse hairs near base and apex); rachises narrowly winged throughout. Laminae 60-200 × 30-160 mm, light green, ± glabrous, broadly triangular to broadly ovate with apex deflexed, deeply 3-4-pinnate, primary pinnae often up-curved. Ultimate segments linear, 0.3-1.5 mm wide, obtuse, margins shallowly toothed. Sori numerous, terminating ultimate segments, slightly sunken in lamina, many on each primary pinna. Involucre round to ovoid, bilabiate, almost divided almost to base, 0.8-1.5 mm long, 0.5-1.5 mm wide; base cuneate, only slightly immersed; indusial flaps entire, smooth-edged; receptacle included or slightly exserted. Description adapted from Bostock & Spokes (1998) and Brownsey & Smith-Dodsworth (2000).

## SIMILAR TAXA

Sterile plants are virtually impossible to distinguish from *Hymenophyllum multifidum* but when fertile this species is easily recognised by the much smaller sori which are held horizontally or slightly bent but never bent at 90 degrees to the plant of the frond as in *H. multifidum*. The fronds of *H. bivalve* are slightly larger than those of *H. multifidum*, brighter green, notably less prominently curled downwards, and the margins are more finely and less deeply toothed.

## FLOWERING

N.A.

## FLOWER COLOURS

No flowers

## FRUITING

N.A.

## 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

## WHERE TO BUY

Not commercially available

## ATTRIBUTION

Fact sheet prepared for NZPCN by P.J. de Lange (17 April 2011). Description adapted from Bostock & Spokes (1998) and Brownsey & Smith-Dodsworth (2000).

## REFERENCES AND FURTHER READING

Brownsey, P.J.; Smith-Dodsworth, J.C. 2000: New Zealand Ferns and Allied Plants. Auckland, David Bateman  
Bostock, P.D.; Spokes, T.M. 1998: Hymenophyllaceae: Flora of Australia 48: 116-148.  
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 11: 285-309

## NZPCN FACT SHEET CITATION

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

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

## MORE INFORMATION

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