

# Botrychium biforme

## COMMON NAME

fine-leaved parsley fern

## SYNONYMS

*Botrychium australe* var. *millefolium* (Milde) Prantl; *Botrychium cicutarium* var. *dissectum* Hook.f.; *Botrychium ternatum* var. *dissectum* G.M.Thomson; *Botrychium dissectum* sensu J.B.Armstr.; *Sceptridium biforme* (Colenso) Lyon;

## FAMILY

Ophioglossaceae

## AUTHORITY

*Botrychium biforme* Colenso

## FLORA CATEGORY

Vascular – Native

## ENDEMIC TAXON

Yes

## ENDEMIC GENUS

No

## ENDEMIC FAMILY

No

## STRUCTURAL CLASS

Ferns

## NVS CODE

BOTBIF

## CHROMOSOME NUMBER

2n = 90

## CURRENT CONSERVATION STATUS

2017 | Not Threatened

## PREVIOUS CONSERVATION STATUSES

2012 | Not Threatened

2009 | Not Threatened

2004 | Not Threatened

## DISTRIBUTION

Endemic. New Zealand: North Island, South Island, from Mt Pirongia south often sporadic but can be locally common.

## HABITAT

Lowland to alpine. Preferring open ground, short and tall tussock grassland, forest clearings, shrubland, river flats, frost flats, reverting pasture and seasonally flooded ground. It is often found in deeply shaded sites within tall forest, or under dense thickets of grey scrub or frost flat vegetation.



*Botrychium biforme*. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.



Otakaha Stream, Palliser Bay. Photographer: Jeremy R. Rolfe, Date taken: 15/03/2008, Licence: CC BY.

## DETAILED DESCRIPTION

Stout, fleshy reddish green (bronze) to green plants. **Roots** thick, fleshy, not ridged or contracted. **Sterile laminae** 1–(2) stalked, broadly ovate or 5-angled, divided 5–8 times, 30–250 × 30–150 mm, ultimate segments acute, 0.05–0.1 mm wide. **Fertile laminae** 1–(2) borne on a narrower but longer stalk, fertile portion shorter and narrower than sterile laminae, divided 3–5-times, bearing numerous, spherical, yellow-brown sporangia up to c. 10 mm diameter.

## SIMILAR TAXA

*Botrychium australe* R.Br. from which *B. biforme* differs by the absence of ridged, contractile roots, and by the more finely divided sterile fronds whose ultimate segments are 0.1–1 mm wide. *Botrychium biforme* may be found growing intermixed with *B. australe*.

## FLOWERING

Not applicable—spore producing

## FLOWER COLOURS

No flowers

## FRUITING

Not applicable—spore producing

## LIFE CYCLE

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

## PROPAGATION TECHNIQUE

Difficult. Should not be removed from the wild

## THREATS

Not Threatened—however often local and sporadic in its occurrences. This species seems more tolerant of heavily shaded situations and forested habitats than *B. australe*, and there does not appear to be any suggestion of a decline happening within any part of its range.

## ETYMOLOGY

**botrychium**: Bunch of grapes; from the Greek botrus; grape like spore clusters

**biforme**: Two forms or shapes of leaves, from the Latin bi and formis

## ATTRIBUTION

Fact Sheet by P.J. de Lange 6 June 2005. Description 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

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## MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/botrychium-biforme/>