Microschizaea australis

COMMON NAME

southern comb fern

SYNONYMS

Schizaea australis Gaudich., Schizaea fistulosa var. australis (Gaudich.) Hook. f.

FAMILY

Schizaeaceae

AUTHORITY Microschizaea australis (Gaudich.) C.F.Reed

FLORA CATEGORY Vascular – Native

ENDEMIC TAXON No

ENDEMIC GENUS No

ENDEMIC FAMILY No

STRUCTURAL CLASS Ferns

NVS CODE SCHAUS

CHROMOSOME NUMBER 2n = 188

CURRENT CONSERVATION STATUS 2017 | Not Threatened

PREVIOUS CONSERVATION STATUSES

2012 | Not Threatened 2009 | Not Threatened 2004 | Not Threatened

DISTRIBUTION

Indigenous. New Zealand: North Island (from Te Moehau south but scarce north of the Volcanic Plateau), South Island (primarily found west of the main divide), Stewart Island/Rakiura, Chatham Islands (uncommon), Auckland Islands and Campbell Island/Motu Ihupuku. Also South America and Falkland Islands.

HABITAT

In peat bogs, pakihi, fell field, cushion bogs and in poorly drained tussock grassland or in marginal turf communities fringing lakes, tarns and ephemeral pools in forested and open areas.

WETLAND PLANT INDICATOR STATUS RATING

FAC: Facultative Commonly occurs as either a hydrophyte or non-hydrophyte (non-wetlands).

DETAILED DESCRIPTION

Tufted terrestrial fern. **Rhizomes** short-creeping, slender, hairy. **Frond** glabrous, reed-like, undivided, green or pale brown. **Stipe** 20–150 mm long, 0.25–0.5 mm diameter, erect, wiry, smooth. **Laminae** at stipe apices, pinnate, 4–15 mm long, pinnae fertile in 4–8 pairs, 1–4 mm long, infolded. **Sporangia** in one row either side of midrib.





Perry saddle, Heaphy track, November. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.



Perry saddle, Heaphy track, November. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.

SIMILAR TAXA

Allied to <u>Microschizaea fistulosa</u> from which it differs by its usually smaller size (stipe 20–150 mm cf. 100–500 mm long in *M. fistulosa*), smaller fertile laminae (4–15 mm cf. 7–30 mm in *M. fistulosa*), slightly smaller pinnae (1–4 mm cf. 1–5 mm long in *M. fistulosa*), ecological preference for montane and subantarctic habitats, and perhaps most convincingly by its different chromosome number (2*n* = 188 cf. 2n= 388, 540 in *M. fistulosa*). The distinctiveness of *Microschizaea australis* from *M. fistulosa* was confirmed by Ke et al. (2022).

FLOWERING N.A.

FLOWER COLOURS

No flowers

FRUITING N.A.

PROPAGATION TECHNIQUE

Difficult—should not be removed from the wild.

ETYMOLOGY

australis: Southern

WHERE TO BUY Not commercially available

ATTRIBUTION

Fact Sheet Prepared for NZPCN by: P.J. de Lange (10 March 2011). Description modified 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.

Ke B-F, Wang G-J, Labiak PH, Rouhan G on behalf of the GoFlag Consortium, Chen C-W, Shepherd LD, Ohlsen DJ, Renner MAM, Karol KG, Li F-W, Kuo L-Y. 2022. Systematics and Plastome Evolution in Schizaeaceae. *Frontiers in Plant Science 3*: 885501. <u>https://doi.org/10.3389/fpls.2022.885501</u>.

NZPCN FACT SHEET CITATION

Please cite as: de Lange, P.J. (Year at time of access): Microschizaea australis Fact Sheet (content continuously updated). New Zealand Plant Conservation Network. https://www.nzpcn.org.nz/flora/species/microschizaea-australis/ (Date website was queried)

MORE INFORMATION https://www.nzpcn.org.nz/flora/species/microschizaea-australis/