

Nephrolepis brownii

COMMON NAMES

rough sword fern

BIOSTATUS

Native

CURRENT CONSERVATION STATUS

2023 | At Risk – Naturally Uncommon | Qualifiers: RR, SO

[Jump to previous conservation statuses](#)

CATEGORY

Vascular

STRUCTURAL CLASS

Ferns

DETAILED DESCRIPTION

Stout, rhizomatous fern forming dense patches. **Rhizomes** short-creeping to erect, producing numerous stolons. **Stipes and rachises** pale brown, brittle. **Fron­d lamina** elliptic to narrowly elliptic, pinnate 300–2000 × 100–250 mm, dark green or yellow-green. **Pinnae** 40 or more pairs, the longest 50–150 × 8–16 mm, bearing pale brown scales with fringed margins on lower surface, slightly falcate often with a basal acroscopic lobe, tapering to an acute apex, margins irregularly toothed.

SIMILAR TAXA

Not closely related to either *N. flexuosa* Colenso or *N. cordifolia* (L.)C.Presl. On Raoul it is sympatric with *N. flexuosa* from which it differs by the much longer, sickle-shaped pinnae whose undersides are covered by fringed scales. From *N. cordifolia* it further differs by its lack of tubers.

DISTRIBUTION

Indigenous. Kermadec Islands (Dayrell Island, Raoul Island, Macauley Island, Curtis Island). Common throughout the Pacific and Australia, and extending into Malesia and India. Probably more widespread than this but the exact application of the name outside our region is unclear.

HABITAT

Common throughout the dry and wet forest habitats of Raoul Island and in open shrubland, around thermal vents and the craters of Raoul. Sometimes found as a low epiphyte. On Macauley Island it is much less common but has been collected growing under Kermadec ngaio (*Myoporum rapense* subsp. *kermadecense* Sykes).

THREATS

No apparent threats. In New Zealand it is confined to the Kermadec Island group where it is abundant on Raoul Island and very local on Macauley Island. It is not regarded as threatened overseas.

GENUS

Nephrolepis

FAMILY

Nephrolepidaceae

AUTHORITY

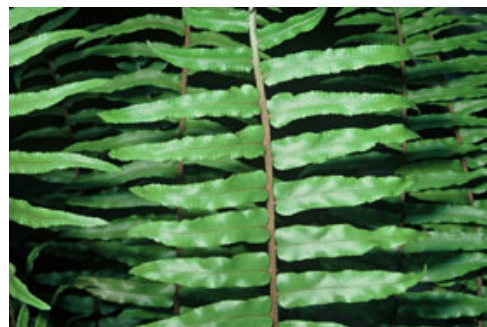
Nephrolepis brownii (Desv.) Hovenkamp et Miyam.

SYNONYMS

Nephrolepis hirsutula (G.Forst.) C.Presl auct. non. New Zealand authors, *Nephrolepis exaltata* (L.) Schott auct. non. New Zealand authors



Taken in May. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.



Taken in May. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.

TAXONOMIC NOTES

Plants from the Kermadecs have been variously referred to as *Nephrolepis exaltata* (L.) Schott and *N. hirsutula* (G.Forst) C.Presl. Hovenkamp & Miyamoto (2005) placed Kermadec material within *N. brownii*. This action was initially followed by de Lange et al. (2006) but on advice from P.J. Brownsey and W.R. Sykes the Kermadecs *Nephrolepis* was then referred back to *N. hirsutula* in de Lange & Rolfe (2010). Recently, it has been decided that the Kermadec islands *Nephrolepis* is indeed *N. brownii* (de Lange 2015; L.R. Perrie pers. comm.). So that name is reinstated here.

ENDEMIC TAXON

No

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

PROPAGATION TECHNIQUE

Easily grown from rooted pieces and fresh spores. Cold sensitive. In ideal conditions a very fast growing fern that can become invasive. An excellent pot plant. Best grown in partial shade, in a rich, moist but free draining soil.

ETYMOLOGY

nephrolepis: Kidney scale

CHROMOSOME NUMBER

2n = 82

PREVIOUS CONSERVATION STATUSES

2017 | At Risk – Naturally Uncommon | Qualifiers: RR, SO

2012 | At Risk – Naturally Uncommon | Qualifiers: RR, SO

2009 | At Risk – Naturally Uncommon | Qualifiers: SO, OL

2004 | Range Restricted

[Jump to current conservation status](#)

REFERENCES AND FURTHER READING

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

de Lange PJ. 2015. Recent vegetation succession and flora of Macauley Island, Southern Kermadec Islands. *Bulletin of the Auckland Museum* 20: 207–229.

de Lange PJ, Rolfe JR. 2010. New Zealand indigenous vascular plant checklist. New Zealand Plant Conservation Network, Wellington, NZ. 131 p.

de Lange PJ, Sawyer JWD, Rolfe JR. 2006. New Zealand indigenous vascular plant checklist. New Zealand Plant Conservation Network, Wellington, NZ. 94 p.

Hovenkamp, P.H.; Miyamoto, F. 2005: A conspectus of the native and naturalized species of *Nephrolepis* (*Nephrolepidaceae*) in the world. *Blumea* 50: 279–322.

ATTRIBUTION

Fact sheet prepared for NZPCN by P.J. de Lange 10 August 2005. Description from Brownsey & Smith-Dodsworth (2000).

NZPCN FACT SHEET CITATION

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

MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/nephrolepis-brownii/>

PDF DATE

25 May 2026