

Notogrammitis rigida

COMMON NAME

southern strapfern

SYNONYMS

Grammitis crassa Fée; Grammitis rigida Hombron; Polypodium australe var. rigida (Hombron) Cockayne; Polypodium billardierei var. rigidum (Hombron) Cockayne

FAMILY

Polypodiaceae

AUTHORITY

Notogrammitis rigida (Hombron) Parris

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Ferns

NVS CODE

NOTRIG

CURRENT CONSERVATION STATUS

2017 | At Risk – Naturally Uncommon | Qualifiers: DP, Sp

PREVIOUS CONSERVATION STATUSES

2012 | At Risk – Naturally Uncommon | Qualifiers: Sp

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

2004 | Sparse

DISTRIBUTION

Endemic. New Zealand: South Island (Fiordland coast), Stewart Island/Rakiura, Auckland Islands.

HABITAT

Coastal. Usually terrestrial, this fern is confined to mossy rock faces, shaded cliff faces and recesses just above the high tide mark. It is occasionally found as a low epiphyte in coastal shrubland.

DETAILED DESCRIPTION

Tufted, terrestrial, rupestral or epiphytic fern. **Rhizome** sub-erect to short-creeping; paleae red-brown, lanceolate, acute, $8.0\text{--}13.0 \times 1.0\text{--}1.2$ mm. **Stipe** indistinct, winged almost to base; stipe hairs absent. **Lamina** $(90)\text{--}100.2\text{--}170.6\text{--}(220.0) \times (10)\text{--}10.2\text{--}11\text{--}(18)$ mm; linear-oblong to oblong, acute, lamina hairs absent or scattered, mainly on midrib, brown, multicellular, to 1 mm long; texture thickly coriaceous; veins invisible or rarely slightly raised on lower surface in dried material; endings not darkened; midrib slightly raised on lower surface, concolorous with or darker than lamina. **Sori** oblong to linear, oblique, in middle and upper part of frond, c. 20–30 pairs, $2\text{--}10 \times 1.5\text{--}3.0$ mm; soral vein extending beyond the sorus, equal in length to the basiscopic vein, both sometimes branching and anastomosing, both nearly reaching the margin. **Sporangia** $(250)\text{--}293.9\text{--}349.1\text{--}(400)$ μm long; indurated cells of annulus $(10)\text{--}10.8\text{--}12.8\text{--}(16)$. **Spores** $(33)\text{--}37.4\text{--}46.0\text{--}(57)$ μm diameter.



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Bowen Falls, Milford. Photographer: Gillian M. Crowcroft, Licence: All rights reserved.

SIMILAR TAXA

A distinctive species unlikely to be confused with any other strap-fern. The bright green, leathery fronds, 10 or more mm wide, with their irregular marginal lobes and projections immediately distinguish this from all other indigenous strap-ferns.

LIFE CYCLE

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

PROPAGATION TECHNIQUE

Difficult. Should not be removed from the wild.

THREATS

Generally regarded as a naturally uncommon species. This species is characteristic of the high rainfall portions of the coastline of Fiordland, Stewart Island/Rakiura and the Auckland Islands. Within these habitats it can at times be locally common though often sparsely distributed in its occurrences. There is, as yet, no evidence of any decline happening within this species range.

ETYMOLOGY

notogrammitis: From the Greek noto- 'southern' and gramma 'line', referring to this new genus of southern strap ferns which were previously in *Grammitis*.

rigida: Rigid

WHERE TO BUY

Not commercially available

TAXANOMIC NOTES

The New Zealand species of *Grammitis* along with *Ctenopteris heterophylla* and one Australian *Grammitis* (*G. garrettii*) one Lord Howe (*G. diminuta*) and one species endemic to the Moluccas and Indonesian (*G. kairatuensis*) have traditionally been placed in *Grammitis* (Parris & Given 1976; Parris 1998). However, these species (with the exception of *G. diminuta*, *G. kairatuensis* and *G. stenophylla*; B.S.Parris pers. comm. to P.J. de Lange January 2011) have been transferred to a new genus, *Notogrammitis* Parris (Perrie & Parris 2012).

ATTRIBUTION

Fact sheet prepared for NZPCN by P.J. de Lange (25 April 2011). Description from Parris & Given (1976)

REFERENCES AND FURTHER READING

- Parris BS. 1998. Grammitidaceae. *Flora of Australia* 48, *Ferns Gymnosperms and allied groups*: 450–468. ABRS/CSIRO Victoria, Australia.
- Parris BS, Given DR. 1976. A taxonomic revision of *Grammitis* Sw. (Grammitidaceae: Filicales) in New Zealand. *New Zealand Journal of Botany* 14(1): 85–111. <https://doi.org/10.1080/0028825X.1976.10428655>.
- Perrie LR, Parris BS. 2012. Chloroplast DNA sequences indicate the grammitid ferns (Polypodiaceae) in New Zealand belong to a single clade, *Notogrammitis* gen. nov. *New Zealand Journal of Botany* 50(4): 457–472. <https://doi.org/10.1080/0028825X.2012.735247>.
- 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

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