

Notogrammitis ciliata

COMMON NAME

strapfern

SYNONYMS

Grammitis ciliata Colenso; *Polypodium australe* var. *villosum* (Hook.f.) Cheeseman; *Polypodium australe* var. *ciliata* (Colenso) Kirk; *Polypodium billardierei* var. *villosum* (Hook.f.) Cheeseman; *Polypodium paradoxum* Colenso; *Grammitis australis* var. *villosa* Hook.f.

FAMILY

Polypodiaceae

AUTHORITY

Notogrammitis ciliata (Colenso) Parris

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Ferns

NVS CODE

NOTCIL

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.

HABITAT

Coastal to montane, usually terrestrial on damp earth and clay banks, or rupestral, less commonly epiphytic on both dead and living trees (often on exposed roots and buttresses) in closed forest overlying mostly older sedimentary and metamorphic rocks and volcanics



Eastern Hutt hills above Naenae. Photographer: Jeremy R. Rolfe, Date taken: 05/01/2009, Licence: CC BY.



Stokes Valley, Lower Hutt. Photographer: Jeremy R. Rolfe, Date taken: 18/11/2005, Licence: CC BY.

DETAILED DESCRIPTION

Terrestrial, rupestral (or rarely a low epiphyte) fern. **Rhizome** erect to short-creeping; paleae light brown, lanceolate or rarely lanceolate-ovate, acute, rarely obtuse, 1.8–4.8 × 0.25–0.75 mm. **Stipe** indistinct, winged almost to base; stipe hairs whitish to pale red-brown, sparse to abundant, (0.2)–0.6–1.7 mm long. **Lamina** linear-oblongate, acute, (17)–23–55–(95) × (2.0)–2.4–4.4–(6.0) mm; lamina hairs whitish to pale red-brown, sparse to common except in sori where usually abundant and sometimes longer than those elsewhere on the lamina, sometimes absent except in sori, (0.3)–0.6–1.5–(2.0) mm long, lacking shorter abundant marginal hairs as in *N. pseudociliata*; texture thinly coriaceous; veins ± visible to visible in transmitted light, sometimes raised on upper surface in dried specimens, vein endings not darkened; midrib raised on lower surface, usually darker than lamina. **Sori** subglobose to oblong, oblique or nearly parallel to midrib, sometimes nearly covering frond under-surface when mature, in middle or middle and upper part of frond, (1)–4–16 pairs, 1.0–4.0 × 1.0–1.5 mm; soral vein not extending beyond sorus, usually shorter than basiscopic vein, neither reaching the margin. **Sporangia** (150)–166.4–207.0–(260) µm long; indurated cells of annulus (9.0)–10.8–13.0–(16.0). **Spores** (19.0)–24.0–27.8–(33.0) µm diameter.

SIMILAR TAXA

Notogrammitis ciliata is recognised by the lamina being < 100 mm long (mostly 25–45 × 2.5–4.5 mm) and bearing scattered marginal hairs which are of comparable length to those in the sorus (the soral hairs in this species are > 0.5 mm, slender, and never hooked). Irrespective, *Notogrammitis ciliata* remains a very variable species with distinct races which may yet deserve taxonomic segregation.

LIFE CYCLE

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

PROPAGATION TECHNIQUE

Difficult. Should not be removed from the wild

ETYMOLOGY

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

ciliata: From the Latin cilia 'eyelash', meaning fringed with hairs

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 now been transferred to a new genus, *Notogrammitis* Parris (Perrie & Parris 2012).

ATTRIBUTION

Fact sheet prepared for NZPCN by P.J. de Lange (Updated 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

<https://www.nzpcn.org.nz/flora/species/notogrammitis-ciliata/>