

# Notogrammitis crassior

## COMMON NAME

dwarf strap fern

## SYNONYMS

*Polypodium billardieri* var. *pumilum* (J.B.Armstr.) Cheeseman; *Polypodium billardierei* f. *nana* (Franchet) Skottsb.; *Grammitis australis* var. *alpina* S.Jones; *Grammitis australis* var. *nana* Franchet; *Polypodium australe* var. *pumilum* (J.B.Armstr.) Cockayne; *Polypodium crassium* Kirk; *Polypodium pumilum* (J.B.Armstr.) Cockayne; *Grammitis kerguelenensis* Tardieu; *Grammitis nana* Brack.; *Grammitis pumila* J.B.Armstr.; *Grammitis armstrongii* Tindale; *Polypodium australe* var. *minutum* F.Muell.

## FAMILY

Polypodiaceae

## AUTHORITY

*Notogrammitis crassior* (Kirk) Parris

## FLORA CATEGORY

Vascular – Native

## ENDEMIC TAXON

No

## ENDEMIC GENUS

No

## ENDEMIC FAMILY

No

## STRUCTURAL CLASS

Ferns

## NVS CODE

NOTCRA

## CHROMOSOME NUMBER

2n = 74

## CURRENT CONSERVATION STATUS

2017 | Not Threatened | Qualifiers: SO

## PREVIOUS CONSERVATION STATUSES

2012 | Not Threatened

2009 | Not Threatened

2004 | Not Threatened

## DISTRIBUTION

Indigenous. New Zealand: North Island (Mt Hikurangi south but generally scarce), South Island, Stewart Island/Rakiura, Campbell Island/Motu Ihupuku, Macquarie Island. Also known from Australia (New South Wales, Victoria, Tasmania), South America (Chile, Argentina), Falkland Islands, South Georgia, Tristan da Cunha, Gough Island, South Africa, Kerguelen Island, Marion Island, Crozet Island.

## HABITAT

Coastal to alpine (strictly subalpine to alpine in the North Island) mostly in the wetter parts of the main islands of New Zealand. A common fern on boulders and cliff faces, earth banks and stony soils and stream banks. Rarely extends into forest and then only in the southern part of its range



Temple Basin. March. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.



Temple Basin. March. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.

## DETAILED DESCRIPTION

Terrestrial or rupestral fern. **Rhizome** long-creeping (rarely short-creeping), often mat-forming; paleae light brown, ovate to ovate-lanceolate, rarely lanceolate, obtuse to acute, 1.0–3.5 × 0.4–1.2 mm. **Stipes** indistinct, winged almost to base; stipe hairs absent. **Lamina** (4)–5–19–(30) × (2)–2.5–3.4–(5) mm; spatulate to linear-spatulate, rarely broadly oblanceolate, obtuse to broadly acute; lamina hairs occasionally present, sparse, brown, multicellular, to 0.7 mm; texture thickly coriaceous; veins invisible, endings not darkened; midrib slightly raised or completely invisible on underside of lamina, concolorous. **Sori** subglobose to globose, sometimes ± coenosoroid, usually confluent when mature, usually terminal on frond, 1–4–(5) pairs, 1–3 × 1–2 mm, to 8 mm long when coenosoroid; soral vein ± equal in length to basiscopic vein, neither reaching the margin. **Sporangia** (240)–252.5–319.1–(400) µm long; indurated cells of annulus (10)–11–14–(20). **Spores** (31)–39.2–53.6–(65) µm diameter.

## SIMILAR TAXA

Distinguished from the other New Zealand species of *Notogrammitis* by the combination of having a creeping rhizome, fronds 5–19 × 2–3.4 mm, these usually bearing < 3 pairs of sori; with the sori 1–3 mm long and subglobose to globose.

## 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*.

## WHERE TO BUY

Not commercially available

## 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). *Notogrammitis crassior* is the fern that has been known in New Zealand for some time, incorrectly (see Perrie & Parris 2012) as *Grammitis poepiggiana*.

## 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. ABRIS/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>.

## NZPCN FACT SHEET CITATION

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<https://www.nzpcn.org.nz/flora/species/notogrammitis-crassior/> (Date website was queried)

## MORE INFORMATION

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