Doodia australis

COMMON NAMES
rasp fern

BIOSTATUS
Native

CURRENT CONSERVATION STATUS
2023 | Not Threatened | Qualifiers: SO
Jump to previous conservation statuses

CATEGORY
Vascular

STRUCTURAL CLASS
Ferns

FLOWER COLOURS
No flowers

Kerikeri. Photographer: John Barkla, Licence: CC BY.

Auckland. Photographer: Jeremy R. Rolfe, Date taken: 07/07/2007, Licence: CC BY.

DETAILED DESCRIPTION
Vegetative reproduction by stolons or shortly branching rhizome. **Rhizome** rarely prostrate and creeping; clad in dense black scales. **Fronds:** fertile and sterile fronds mostly similar sometimes moderately dimorphic; more or less erect or sterile fronds sometimes inclined to prostrate; harsh; lamina 110–600 mm long. **Stipes and raches** bearing brown scales, these more persistent at the stipe base though mostly shed at frond maturation; pubescent. **Pinnae** c. 20-50 pairs or subopposite; middle pinnae rounded, acute or acuminate at apex; lower pinnae attached by costae, sometimes with auricles developed, or very rarely adnate to the rachis, lowest pair rarely longer than the pairs immediately above them; middle pinnae usually completely, but often partly, adnate, occasionally decurrent, rarely auriculate; upper pinnae adnate to decurrent; terminal pinna 3–55 mm long (0.02–0.11–(0.33)× frond length). Longest pinnae 5.0–100.0 × 2.5–10 mm. Distance between middle pinnae 1–8 mm (0.5–2× pinna width). **Sori** in one row, a second row often partly to nearly completely developed; discrete to more or less confluent, sometimes covering pinna midrib. **Indusium** c. 2 mm long rarely less, more or less linear.

SIMILAR TAXA
Doodia australis is distinguished from the other allied New Zealand *Doodia* species by the pink to red colour of the young emergent fronds; by the lower pinnae adnate (fused) to an unwidened base (adnate) or stalked (costate); by the pubescent rachis; by the terminal pinna being less than one third the total frond length; and by all or most of the pinnae in middle third of the frond partly or completely adnate to rachis. As currently circumscribed *Doodia australis* remains a variable species with a range of reasonably well marked races known, some of these may yet warrant some level of taxonomic rank.

DISTRIBUTION
Indigenous. Kermadec Islands (Raoul Island, Macauley Island). New Zealand: Manawatāwhi / Three Kings Islands, North Island (from Te Paki south to Wellington, abundant north of Waikato, otherwise scarce), South Island (Marlborough Sounds, North-west Nelson and Banks Peninsula). Present in Australia, Norfolk and Lord Howe Islands.

HABITAT
Coastal to lowland in open or forested sites, within light scrub, in rough pasture, and even known as a weedy fern of urban gardens and environments.

GENUS
Doodia

FAMILY
Blechnaceae

AUTHORITY
Doodia australis (Parris) Parris

SYNONYMS
Doodia media subsp. australis Parris; Doodia kunthiana sensu A.Cunn.; Doodia australis (Parris) Parris, Blechnum parrisiae Christenh.

TAXONOMIC NOTES
Perrie et al. (2014) advocated for a broadened circumscription of Blechnaceae whereby a number of genera traditionally recognized as distinct from *Blechnum* were merged within it. However, this view has not met with universal acceptance (see Gasper et al. 2016) and does not seem to be followed worldwide (PPG 2016). From a New Zealand perspective the decision to merge *Doodia* in *Blechnum*, and rejection of *Diploblechnum* has not been universally accepted either e.g., Wilcox & Warden (2017), and as such it is considered appropriate to follow world opinion and accept the taxonomy of Gasper et al. (2016) and recommendations of the PPG (2016).

ENDEMIC TAXON
No

ENDEMIC GENUS
No

ENDEMIC FAMILY
No

FLOWERING
Not applicable—spore producing

FRUITING
Not applicable—spore producing

LIFE CYCLE AND DISPERSAL
Minute spores are wind dispersed (Thorsen et al., 2009).

PROPAGATION TECHNIQUE
Extremely easily grown from fresh spore (it often self sows around the garden, and in some sites self-establishes through wind blown spores). Reasonably frost-tolerant, and does best in full sun, especially on poorly drained clay soils. Drought tolerant.

ETYMOLOGY
doodia: Named for Samuel Doody, 17th century London apothecary and curator
australis: Southern

NVS CODE
DOOAUS

CHROMOSOME NUMBER
2n = 128

PREVIOUS CONSERVATION STATUSES

2017 | Not Threatened | Qualifiers: SO
2012 | Not Threatened
2009 | Not Threatened
2004 | Not Threatened
Jump to current conservation status

REGIONAL CONSERVATION STATUSES

Auckland: 2025 | Regionally Not Threatened | Qualifiers: DPS, DPT Help
Current regional threat status assessments prepared according to Crisp et al. (2025) are displayed when available. The Auckland conservation status information is sourced from the "Conservation status of vascular plant species in Tāmaki Makaurau / Auckland" Simpkins E et al. (2025) report.
Northland: 2026 | Regionally Not Threatened Help
Current regional threat status assessments prepared according to Crisp et al. (2025) are displayed when available. The Northland conservation status information is sourced from the "Conservation status of indigenous vascular plants in Northland | Taitokerau" Ford et al. 2026 report.

REFERENCES AND FURTHER READING

Gasper AL, de Oliveira Dittrich VA, Smith AR, Salino A. 2016. A classification for Blechnaceae (Polypodiales: Polypodiopsida): New genera, resurrected names, and combinations. *Phytotaxa 275*: 191–227. https://doi.org/10.11646/phytotaxa.275.3.1.
Parris BS. 1972. The genus *Doodia* (Blechnaceae: Filicales) in New Zealand. *New Zealand Journal of Botany 10*: 585–610. https://doi.org/10.1080/0028825X.1972.10430248.
Perrie LR, Wilson RK, Shepherd LD, Ohlsen DJ, Batty EL, Brownsey PJ, Bayly MJ. 2014. Molecular phylogenetics and generic taxonomy of Blechnaceae ferns. *Taxon 63(4)*: 745–758. https://doi.org/10.12705/634.13.
PPG 1: The Pteridophyte Phylogeny Group 2016. A community-derived classification for extant lycophytes and ferns. *Journal of Systematics and Evolution 54*: 563–603. https://doi.org/10.1111/jse.12229.
Wilcox M, Warden J. 2017. Botany of Hillsborough coast bush reserves, Manukau Harbour, Auckland. *Auckland Botanical Society Journal 72*: 32–46.

ATTRIBUTION

Fact sheet prepared for NZPCN by P.J. de Lange (4 March 2012). Description adapted from Parris (1973) where this species was treated as Doodia media subsp. australis.

MORE INFORMATION

https://www.nzpcn.org.nz/flora/species/doodia-australis/

PDF DATE

14 August 2026