Pouzolzia australis

COMMON NAME
Kermadec nettle-tree

SYNONYMS
Boehmeria dealbata Cheeseman, Boehmeria australis var. dealbata (Cheeseman) Sykes, Boehmeria australis subsp. dealbata (Cheeseman) Sykes, Boehmeria calophleba C.Moore et F.Muell

FAMILY
Urticaceae

AUTHORITY
Pouzolzia australis (Endl.) Friis et Wilmot-Dear

FLORA CATEGORY
Vascular – Native

ENDEMIC TAXON
No

ENDEMIC GENUS
No

ENDEMIC FAMILY
No

STRUCTURAL CLASS
Trees & Shrubs - Dicotyledons

NVS CODE
POUAUS

CHROMOSOME NUMBER
2n = 28

CURRENT CONSERVATION STATUS
2017 | Threatened – Nationally Endangered | Qualifiers: RR, St, TO

PREVIOUS CONSERVATION STATUSES
2012 | At Risk – Naturally Uncommon | Qualifiers: EF, RR, TO
2009 | At Risk – Naturally Uncommon | Qualifiers: OL, IE
2004 | Threatened – Nationally Endangered

BRIEF DESCRIPTION
Small bushy tree bearing light green soft wrinkled triangular pointed leaves that have prominent veins on the whiteish underside inhabiting Raoul Island in the Kermadec Islands. Wood soft. Leaves 7–15 cm long, edge with evenly spaced teeth. Flowers tiny, in small round clusters at base of leaves.

Pouzolzia australis at Raoul Island. Photographer: Bec Stanley, Licence: CC BY-SA.

cult. April. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.

DISTRIBUTION
As currently circumscribed by Wilmot-Dear & Friis (2006) *Pouzolzia australis* is indigenous to Norfolk and Lord Howe Islands as well as the Kermadec Islands, where it is now known only from Raoul and Macauley Islands. While the merger of *Boehmeria australis* subsp. *dealbata* with *B. australis* subsp. *australis* into *Pouzolzia* as *P. australis* seems sensible, the merger of the very distinctive Lord Howe endemic *Boehmeria calophleba* requires further critical study before it should be universally followed. For a concise explanation of the differences between *Boehmeria* and *Pouzolzia* see Wilmot-Dear et al. (2009).

HABITAT
Coastal forest, cliff faces, recent and semi-stable slips, low scrub.

DETAILED DESCRIPTION
Shrub or small tree up to 8 m tall. **Branchlets** at first covered in fine white pubescence, maturing with age grey. **Leaves** alternate, 60–200 × 30–60 mm, ovate-ovate-lanceolate, borne on stout petioles 25–30 mm long, leaf apex acuminate, upper surface glabrescent, rugulose to almost smooth, undersides finely clad in dense white hairs (so giving a white colour to leaf undersides). **Midrib and veins** prominent, glabrescent, yellow-green. **Inflorescences** numerous, sessile, axillary glomerules (clusters). **Male flowers** with acuminate perianth segments 2–3 mm long, clad in stiff hairs. **Female flowers** with tubular perianth up to 2 mm long, contracted at 2-toothed apex; stigma filiform, protruding. **Fruits** compressed, broadly winged, the ovoid achenes minute.

SIMILAR TAXA
None within the New Zealand Botanical Region (for a definition of this area see Allan 1961). Wilmot-Dear & Friis (2006) transferred *Boehemeria australis* to *Pouzolzia* and in the process reduced the Lord Howe endemic *B. calophleba* and Kermadec Islands endemic *B. australis* subsp. *dealbata* into *P. australis*. While their conclusion about the Lord Howe species needs further investigation (the Lord Howe plant is very different from the Norfolk and Kermadec Island plants), their decision about Kermadec and Norfolk plants seems justified. Previously the Kermadec plant had been distinguished from the Norfolk Island nettle tree by its having somewhat whiter undersides to the leaves, and by its slightly less rugose upper leaf surface (see Sykes in de Lange et al. 2005). These distinctions seem relatively minor and without further investigation using modern molecular tools it does seem that the more detailed morphological analysis by Wilmot-Dear & Friis (2006) should be followed.

FLOWERING
Year round

FLOWER COLOURS
Brown, White

FRUITING
Year round

PROPAGATION TECHNIQUE
Very easily grown from fresh seed and cuttings. Plants often arise spontaneously in cultivation from the abundant viable seed produced by established specimens. Very cold sensitive.

THREATS
Formerly threatened with extinction through heavy browsing pressure from goats. Following the eradication of goats from Raoul Island Kermadec nettle tree did not at first recover. Indeed it seems to have declined further and for a decade or so it became very scarce. It was presumed that this was caused by competition from weed species, which had, following the goat eradication, rapidly spread into the type of habitat it was assumed Kermadec nettle tree requires. Current fieldwork now suggests that Kermadec nettle tree on Raoul Island remains a very localised species of the open ridgeline forest, slip scars and valley heads where it seems to remain in small b ut stable populations. In May 2011 *Pouzolzia* was rediscovered on Macauley Island where it had been believed to have gone extinct over a 100 years before. Visited to that island in 2017 and 2018 did not look for the species, so its status there remains unknown. The species is seriously threatened on Norfolk Island.

ETYMOLOGY
australis: Southern

WHERE TO BUY

Commercially available and sold by several specialist native plant nurseries.

ATTRIBUTION

Fact sheet prepared for NZPCN by P.J. de Lange 30 August 2009. Description adapted from Allan (1961).

REFERENCES AND FURTHER READING

Allan HH. 1961. Flora of New Zealand, Volume I. Indigenous Tracheophyta: Psilopsida, Lycopsida, Filicopsida, Gymnospermae, Dicotyledones. Government Printer, Wellington, NZ. 1085 p.

de Lange PJ, Gardner RO, Sykes WR, Crowcroft GM, Cameron EK, Stalker F, Christian ML, Braggins JE. 2005. Vascular flora of Norfolk Island: some additions and taxonomic notes. *New Zealand Journal of Botany 43(2)*: 563–596. https://doi.org/10.1080/0028825X.2005.9512975.

Wilmot-Dear CM, Friss I. 2006. The Old World species of *Pouzolzia* (Urticaceae, tribus Boehmerieae). A taxonomic revision. *Opera Botanica (Nordic Journal of Botany) 24*: 5–114. https://doi.org/10.1111/j.1756-1051.2004.tb00825.x

Wilmot-Dear CM, Acharya N, Kravtsova TI, Friis I. 2009. *Pouzolzia rugulosa* transferred from *Boehmeria*, and the distinction between *Boehmeria* and *Pouzolzia* (Urticaceae). *Edinburgh Journal of Botany 66*: 51–64. https://doi.org/10.1017/S096042860900523X.

NZPCN FACT SHEET CITATION

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MORE INFORMATION

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