Dacrycarpus dacrydioides

COMMON NAMES
kahikatea, white pine

BIOSTATUS
Native – Endemic taxon

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

CATEGORY
Vascular

STRUCTURAL CLASS
Trees & Shrubs - Gymnosperms

SIMPLIFIED DESCRIPTION
This conifer is New Zealand's tallest indigenous plant growing up to 65m. It is found in lowland forest, formerly dominant on frequently flooded or poorly drained alluvial soils. It was once the dominant tree of a distinct swamp forest type all but extinct in the North Island—the best examples remain on the West Coast of the South Island.

FLOWER COLOURS
No flowers

DETAILED DESCRIPTION
Stout, dioecious, cohort-forming conifer, 50–(65) m tall. **Trunk** 1–(2) m diam., often fluted and buttressed. **Bark** grey to dark-grey, falling in thick, sinuous flakes. **Wood** white, odourless. **Trunks** bare for ¾ of length, subadults with a distinctive columnar growth habit, branches arising from ⅓–½ trunk length. **Branchlets** slender, drooping. **Leaves** of juveniles subdistichous, subpatent, narrow-linear, subfalcate, acuminate, decurrent, 3–7 × 0.5–1mm red, wine-red, dark-green to green; of subadults less than or equal to 4 mm., dark green or red; those of adults 1–2 mm., imbricating, appressed, keel, subtrigonous, lanceolate-subulate to acuminate with broader base, brown-green or glaucous. **Male cones** terminal, oblong, 10 mm. **Pollen** pale yellow. **Ovule**, terminal, solitary glaucescent. **Receptacle** fleshy, oblong, compressed, warty, 2.5–6.5 mm, yellow to orange-red. **Seed** broadly obovate to circular (4)–4.5–6 mm diam., purple-black, thickly covered in glaucous bloom.

Kahikatea. Photographer: Department of Conservation, Licence: Public domain.

Upper Hutt. Photographer: Jeremy R. Rolfe, Date taken: 05/09/2004, Licence: CC BY.

SIMILAR TAXA
A distinctive tree of usually swampy alluvial terraces. The columnar growth form of subadults, buttressed and fluted trunk bases, scale-like leaves, and terminal fruits bearing the distinctive circular seeds serve to immediately distinguish this species from all other indigenous conifers.

DISTRIBUTION
Endemic. North Island, South Island and Stewart Island/Rakiura.

HABITAT
Lowland forest, formerly dominant on frequently flooded, and/or poorly drained alluvial soils. Occasionally extends into lower montane forest. Once the dominant tree of a distinct swamp forest type all but extinct in the North Island—the best examples remain on the West Coast of the South Island.

THREATS
Not Threatened, although as a forest-type it has been greatly reduced through widespread logging. Very few intact examples of kahikatea-dominated forest remain in the North Island.

GENUS
Dacrycarpus

FAMILY
Podocarpaceae

AUTHORITY
Dacrycarpus dacrydioides (A.Rich.) de Laub.

SYNONYMS
Dacrydium excelsum D.Don in Lamb., Dacrydium ferrugineum Houttee ex Gord., Dacrydium thuioides Banks et Solander ex Carr., Nageia excelsa Kuntze, Podocarpus dacrydioides Richard, Podocarpus thujoides R.Br. In Bennett, Podocarpus excelsus (D.Don) Druce; Podocarpus excelsus (D. Don.) Druce

ENDEMIC TAXON
Yes

ENDEMIC GENUS
No

ENDEMIC FAMILY
No

FLOWERING
October–January

FRUITING
February–April

PROPAGATION TECHNIQUE
Easily grown from fresh seed. Can be grown from hard-wood cuttings but rather slow to strike.

WETLAND PLANT INDICATOR STATUS RATING
FAC: Facultative
Commonly occurs as either a hydrophyte or non-hydrophyte (non-wetlands).

CULTURAL USE/IMPORTANCE
Kahikatea is New Zealand's tallest indigenous tree. The white odourless timber was used extensively to make butter boxes, for much of the late 1800s and early 1900s. It was this practice that all but eliminated kahikatea-dominated swamp forest from the North Island and northern South Island.

CULTIVATION
Commonly cultivated and frequently sold by most commercial nurseries and outlets. A very popular garden tree. A form with distinctly glaucous foliage is occasionally on offer.

PLANT OF THE MONTH
This plant has been featured as a Plant of the Month – see Trilepidea: NZPCN newsletter for June 2007 for the full story.

ETYMOLOGY
dacrycarpus: Tear shaped fruit
dacrydioides: Like a dacrydium

NVS CODE
DACDAC

CHROMOSOME NUMBER
2n = 20

PREVIOUS CONSERVATION STATUSES

2017 | Not Threatened
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.
Otago: 2025 | Regionally Not Threatened Help
Current regional threat status assessments prepared according to Crisp et al. (2025) are displayed when available. The Otago conservation status information is sourced from the "Conservation Status of Indigenous Vascular Plants in Otago, 2025" Jarvie S 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

Allan HH. 1961. Flora of New Zealand, Volume I. Indigenous Tracheophyta: Psilopsida, Lycopsida, Filicopsida, Gymnospermae, Dicotyledones. Government Printer, Wellington, NZ. 1085 p.
Gardner R. 2001. Notes towards an excursion Flora. Rimu and kahikatea (Podocarpaceae). *Auckland Botanical Society Journal 56*: 74–75.

ATTRIBUTION

Fact Sheet prepared for NZPCN by P.J. de Lange 12 January 2004: Description adapted from Allan (1961).
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MORE INFORMATION

https://www.nzpcn.org.nz/flora/species/dacrycarpus-dacrydioides/

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