

Dacrycarpus dacrydioides

COMMON NAME

kahikatea, white pine

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

FAMILY

Podocarpaceae

AUTHORITY

Dacrycarpus dacrydioides (A.Rich.) de Laub.

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Trees & Shrubs - Gymnosperms

NVS CODE

DACDAC

CHROMOSOME NUMBER

2n = 20

CURRENT CONSERVATION STATUS

2017 | Not Threatened

PREVIOUS CONSERVATION STATUSES

2012 | Not Threatened

2009 | Not Threatened

2004 | Not Threatened

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.

WETLAND PLANT INDICATOR STATUS RATING

FAC: Facultative

Commonly occurs as either a hydrophyte or non-hydrophyte (non-wetlands).



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



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

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 $\frac{3}{4}$ of length, subadults with a distinctive columnar growth habit, branches arising from $\frac{1}{3}$ – $\frac{1}{2}$ trunk length. **Branchlets** slender, drooping. **Leaves** of juveniles subdistichous, subpatent, narrow-linear, subfalcate, acuminate, decurrent, 3–7 × 0.5–1 mm 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, subtrigonus, 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.

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.

FLOWERING

October–January

FLOWER COLOURS

No flowers

FRUITING

February–April

PROPAGATION TECHNIQUE

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

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.

ETYMOLOGY

dacrycarpus: Tear shaped fruit

dacrydioides: Like a dacrydium

WHERE TO BUY

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.

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.

ATTRIBUTION

Fact Sheet prepared for NZPCN by P.J. de Lange 12 January 2004: 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.

Gardner R. 2001. Notes towards an excursion Flora. Rimu and kahikatea (Podocarpaceae). *Auckland Botanical Society Journal* 56: 74–75.

NZPCN FACT SHEET CITATION

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

MORE INFORMATION

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