

Fuscospora solandri

COMMON NAME

black beech, tawhairauriki

SYNONYMS

Fagus solandri Hook.f., *Nothofagus solandri* (Hook. f.) Oerst. var. *solandri*,
Nothofagus solandri (Hook.f.) Oerst.

FAMILY

Nothofagaceae

AUTHORITY

Fuscospora solandri (Hook.f.) Heenan et Smissen

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Trees & Shrubs - Dicotyledons

NVS CODE

NOTSVS

CHROMOSOME NUMBER

2n = 26

CURRENT CONSERVATION STATUS

2017 | Not Threatened

PREVIOUS CONSERVATION STATUSES

2012 | Not Threatened

2009 | Not Threatened

2004 | Not Threatened

BRIEF DESCRIPTION

Forest canopy tree in lowland dry areas with a dark sooty trunk bearing small leathery leaves arranged along the twig and that are pale underneath and with slightly incurved margins. Leaves 10–15 mm long, with a rounded tip. Flowers and fruits inconspicuous, but these and new leaf growth can change a trees colour.

DISTRIBUTION

Endemic. New Zealand: North Island (very rare north of the Central Volcanic Plateau and East Cape. Te Hauturu-o-Toi / Little Barrier Island appears to be the current northern limit), South Island.

HABITAT

Lowland to montane forest. At times the canopy dominant and forming its own distinctive forest type.



Remutaka Forest Park. Photographer: Jeremy R. Rolfe, Date taken: 16/05/2002, Licence: CC BY.



Kaitoke Regional Park, Upper Hutt. Photographer: Jeremy R. Rolfe, Date taken: 26/10/2003, Licence: CC BY.

DETAILED DESCRIPTION

Tree up to 25 m tall, wood pinkish to yellowish when fresh, often with darker patches. **Bark** rough, furrowed, charcoal black. **Trunk** 1 m or more diam. **Branches** numerous, stout, spreading, "pagodaform". **Petioles** 1–2 mm. **Leaves** 10–15 × 5–10 mm, narrow- to elliptic-oblong, obtuse, obliquely cuneate at base, apex often apiculate, leathery, glabrous, dark green above, undersides clad in greyish white tomentum, venation distinct on both surfaces. **Domatia** absent. **Male inflorescences** 1–4 per branchlet, on short sparsely pubescent peduncles; flowers 1–2, sessile. Perianth broadly-campanulate, 2 × 3 mm, shallowly and obtusely 4–5-lobed; stamens 8–17, anthers 2–3 mm long, dark red. **Female inflorescences** ovoid, 1–2 per branchlet, pubescent to pilose hairy, sessile, flowers 1–3. Lateral flowers trimerous, terminal ones dimerous; stigmas clavate. Cupule 6–7 mm, glabrous or pubescent, 3-partite. **Nuts** up to 7 mm long, wings broad at base, narrowed to apex.

SIMILAR TAXA

Differs from mountain beech (*Fuscospora cliffortioides*) by the oblong leaves with obtuse apices, by the obvious leaf venation and sparsely hairy ovary. Although closely allied to mountain beech and readily forming hybrids with it, both beeches should be regarded as distinct species not varieties of each other.

FLOWERING

September–December

FLOWER COLOURS

Red/Pink

FRUITING

November–April

PROPAGATION TECHNIQUE

Easy from fresh seed, cuttings are very difficult to strike. Young plants are very quick growing but do best in cool climates.

ETYMOLOGY

solandri: Named after Daniel Carlsson Solander (19 February 1733 - 13 May 1782) who was a Swedish naturalist and an apostle of Carl Linnaeus.

WHERE TO BUY

Commonly cultivated in suitable climates. Frequently available from commercial nurseries.

ECOLOGICAL IMPORTANCE

Secondary beech host for yellow mistletoe (*Alepis flavida*) and red mistletoe (*Peraxilla tetrapetala*).

TAXONOMIC NOTES

Although many botanists have tended to regard *Fuscospora cliffortioides* as a variety of black beech (*F. solandri*), or even disregard it altogether, recent DNA data combined with phylogenetic mapping of character states confirm the view of Molloy et al. (1999) that *F. cliffortioides* it is a distinct species (see Heenan & Smitsen 2013). Nevertheless field recognition is often hampered by the fact that both *F. cliffortioides* and *F. solandri* hybridise, and in some places the hybrids may form complex introgressive hybrid swarms. In this situations it is understandable that field botanists in particular have interpreted 'hybrid swarms' as evidence of a cline between both 'species' resulting in the interpretation of either the one species (*F. solandri*) or two varieties.

ATTRIBUTION

P.J. de Lange (1 January 2006). 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.
- Anonymous. 1957. Construction of key for the genus *Nothofagus*. *Auckland Botanical Society Journal* 14: 2–3.
- Heenan PB, Smitsen RD. 2013. Revised circumscription of *Nothofagus* and recognition of the segregate genera *Fuscospora*, *Lophozonia*, and *Trisyngyne* (Nothofagaceae). *Phytotaxa* 146: 1–31.
<http://dx.doi.org/10.11646/phytotaxa.146.1.1>.
- Molloy BPJ, de Lange PJ, Clarkson BD. 1999. *Coprosma pedicellata* (Rubiaceae), a new species from New Zealand. *New Zealand Journal of Botany* 37(3): 383–397. <https://doi.org/10.1080/0028825X.1999.9512643>.

NZPCN FACT SHEET CITATION

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MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/fuscospora-solandri/>