

South America broadleaved species

FEE are not to use these species due to *Phytophthora pseudosyringae*.

Notes for info



Lenga

Nothofagus pumilio

Native range

Native to southern Chile and Argentina where it covers nearly 20° of latitude from Cape Horn northwards.

Provenance choice

Forest plots have only been established in Britain in the last 20 years and nothing is known about provenance variation. Form in existing British trials is often poor which may reflect poor provenance choice. The wide natural range suggests that seed sources from the XIth region (Coihaque and Cochrane) should be adapted to a British climate.

Site requirements

This is a fast growing species which is moderately tolerant of exposure and likely to be more cold hardy than rauli or roble. Best growth is on moderately dry to fresh soils of poor to medium nutrient regime. Not suited to compacted, alkaline or peat soils or to those with very poor soil nutrient regime.

Pests and pathogens

Subject to major episodes of defoliation by caterpillars in its native range, which have appears to have increased in severity possibly as a result of climate change. Otherwise few pathogens are known on this *Nothofagus* species.

Use

This is a species which could find an expanded role in upland forests as part of a diversification strategy.

Roble (ROB)

Nothofagus obliqua

Native range

Native to the lowlands of central-southern Chile.

Provenance choice

Provenances from the southern part of the natural range or from good quality British stands should be preferred.

Site requirements

A fast growing light demanding species which will outyield most native British broadleaved species on suitable sites. The stem form is typically not as good as that of rauli. Not cold hardy throughout Britain and can be killed by temperatures below -18°C; an early flushing species which can be damaged by late spring frosts and does not withstand exposure. Tolerates warmer and drier sites than rauli and therefore is better suited to suitable soils in eastern Britain. Best growth is on moderately dry to fresh soils of poor to medium nutrient regime. Not suited to compacted or peat soils or to those of very poor soil nutrient regime.

Pests and pathogens

Mature stands can suffer sudden dieback from *Phytophthora pseudosyringae*.

Use

Since the species is currently cold limited in Britain, it should benefit from climate warming and be suited to a wider range of sites in northern Britain, wherever its site requirements are met.

Rauli (RAU)

Nothofagus alpina (Syn. *N. procera* and *N. nervosa*)

Native range

Native to the lower slopes of the Andes in central-southern Chile and western Argentina.

Provenance choice

Provenances from the southern part of the natural range or from good quality British stands should be preferred.

Site requirements

A very fast growing light demanding species which will outyield all native British broadleaved species on suitable sites. Not cold hardy throughout Britain and can be killed by temperatures below -18°C; an early flushing species which can be damaged by late spring frosts. For this reason, it is currently only recommended for use close to the western coasts and more generally in the western and mild parts of England and Wales. Best suited to well drained fresh soils of poor to medium nutrient status; does not tolerate very poor nutrient status soils or compacted/waterlogged conditions. Is not tolerant of exposure or drought tolerant.

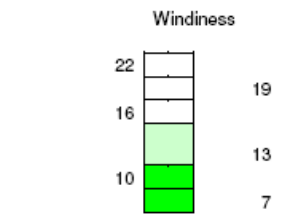
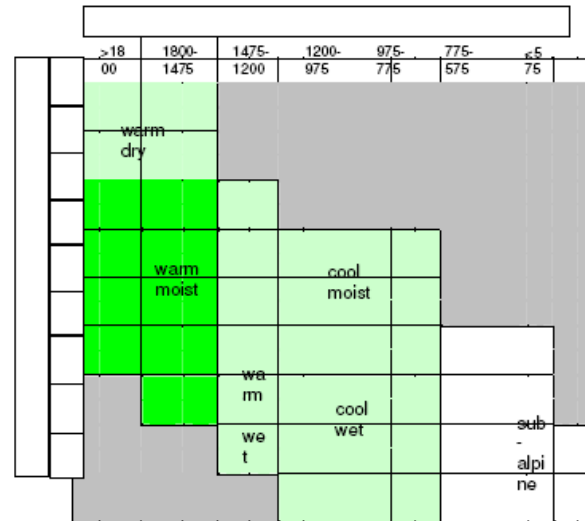
Pests and pathogens

Mature stands can suffer sudden dieback from *Phytophthora pseudosyringae*.

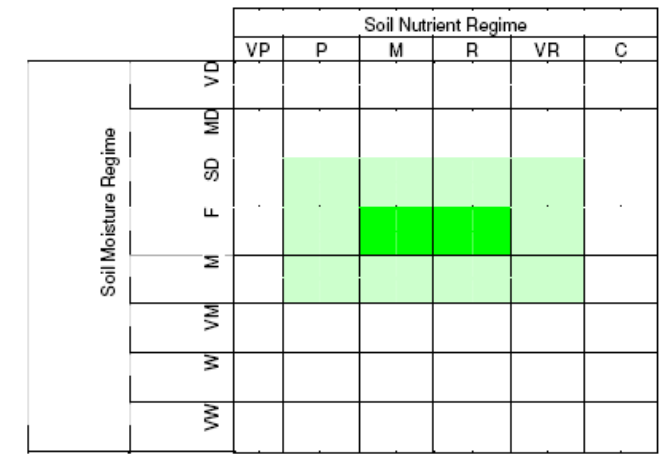
Use

Since it is currently cold limited in Britain, this species may benefit from climate warming and be suited to a wider range of sites in northern Britain, wherever its site requirements are met.

Site Suitability in Great Britain for southern beech (*Nothofagus procera*)



Best growth in maritime climate in warm areas
 Will not tolerate extreme summer drought
 Intolerant of exposure



Grows well on acid brown earths, will not tolerate alkaline soils
 Will not grow well on seasonally waterlogged soils, or on sites prone to flooding
 Intolerant of very droughty soils