



INDIGENOUS SPECIES - MANUKA & OTHER SPECIES OF INTEREST

Indigenous species can provide commercial and economic opportunities for landowners and forest growers in addition to timber resources.

UTILISING OUR NATURAL RESOURCES

Scion is exploring the opportunities that New Zealand indigenous species may provide for forest growers.

In addition to providing valuable timber resources, some species provide other benefits that can help boost the profitability of long rotation commercial species.

We are developing business cases for indigenous species to help growers make comparisons with other forest species and to support investment decisions.

MANUKA

Considerable commercial and research interest is being expressed in growing and managing natural and planted manuka (*Leptospermum scoparium*), particularly for honey and essential oil production.

A recent business case, based on current cost structures for seedlings and establishment, showed that manuka production was marginally cost effective. Breeding to improve honey productivity through increased early growth and flowering, and reduced establishment costs would improve profitability.

Adding profitability. Manuka can be established or managed as a nurse crop for other indigenous and exotic tree species that require early shelter and competition to improve form, reduce establishment rates (stems/ha) and silviculture (pruning) requirements.

Manuka's honey and other non-timber benefits increases the profitability of longer rotation species.



Thinned and pruned red beech. Photo: Ian Platt.



Red beech seedlings are susceptible to frost damage. Photo: Ian Platt.

OTHER SPECIES OF INTEREST

Red beech - *Nothofagus fusca*

The timber has a lustre and natural sheen that tends to improve with age. Despite high shrinkage, once dry, the heartwood of red beech is the most stable timber available in New Zealand, extremely stable by international standards. It is suitable for veneer, decorative and special plywood manufacture.

Black beech - *Nothofagus solandri* var. *solandri*

The timber is strong and stable, with variable durability. Neither the sapwood nor the heartwood is subject to rot except in high hazard conditions. It has good machining, bending and finishing properties and stains well.

Silver beech - *Nothofagus menziesii*

The most popular beech timber. It does not hybridise, making its timber properties more consistent than the other beeches. Wood qualities, such as colour, moisture content and shrinkage, depend on location. Compared with other native beeches, the timber is lighter and more easily worked, but less durable.

Rimu - *Dacrydium cupressinum*

Most widely occurring of the major conifer indigenous trees. The heartwood is highly decorative, even textured, hard, even wearing and durable above ground. It is a commonly used timber with multiple uses. High grades are used for flooring, interior joinery and furniture. Low grades are used for framing.

Puriri - *Vitex lucens*

The dark brown heartwood is hard, heavy and ground durable. The timber's historical use relied on its properties of great strength and durability. Puriri's future uses are likely to rely more on its appearance characteristics of interlocking

grain which is used to good effect in turnery and other high value products.

As one of the fastest growing native hardwoods, puriri can grow at more than one metre in height a year, and over one centimeter in diameter. It will, however, require a nurse crop such as manuka, to achieve its best form.

ABOUT SCION

Scion is a Crown Research Institute that specialises in research, science and technology development for the forestry, wood product and wood-derived materials and other biomaterial sectors. Scion's purpose is to create economic value and contribute to beneficial environmental and social outcomes for New Zealand.

We offer research and development services across the entire forestry value chain, including forest and climate change, forest health and biosecurity, rural fire research, forest management and tree improvement.

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