

8. WESTLAND PINE.—(*Dacrydium Westlandicum*, n.s.)

A small tree of similar dimensions to the manaoa, but easily distinguished by the smaller mature leaves and branchlets. In the young state the leaves have a general resemblance to the young leaves of white pine. It is usually from 40 to 50 feet high, with a trunk from 1 to 2 feet in diameter, and produces a white dense timber of great durability. It attains its greatest dimensions in moist forests on the West Coast of the South Island, and bears a general resemblance to white pine.

It is also called silver pine, or white silver pine.

Notwithstanding its rather small size it must be considered a timber of the first class, well adapted for piles, bridges, constructive works, and general building purposes, for all of which it has been extensively used on the West Coast, where it commands the highest price of all the native timbers.

9. YELLOW SILVER PINE.—(*Dacrydium intermedium*, n.s.)

A tree of similar dimensions to the preceding, but with larger bright-green leaves, somewhat resembling those of the red pine in the young state, but the branches are always erect. Timber yellowish, very dense, and reputed to be even more durable than the preceding. It was first observed on the Great Barrier Island and Cape Colville Peninsula, and was supposed to be a tree form of the pigmy *Dacrydium laxifolium*. On the West Coast it does not descend to the lowest levels, although it is occasionally found growing with *D. Westlandicum* on elevated terraces. It is a valuable addition to our durable timbers.

10. ROUND-LEAVED BEECH.—(*Fagus Menziesii*.)

A handsome tree, not usually attaining the extreme dimensions of the tooth-leaved beech, although exceptional specimens are not unfrequent. The timber is more even in the grain than that of either of the other species, but it does not appear to equal the tooth-leaved beech in strength. When grown in dry elevated situations the timber is equal in durability to that of *F. fusca*, but may possibly be inferior when grown in rich alluvial soil. In the upper part of the Buller Valley it is considered the most durable species, and is termed brown birch; in Otago it is commonly termed red birch, or silver birch.

When young the bark is white and silvery, but when old it becomes longitudinally furrowed. This has led some observers to consider the two forms distinct, but without the slightest foundation. The leaves are roundish or ovate, rather thick, and with indistinct veins; the margins have round indentations or crenatures.

11. PURIRI.—(*Vitex littoralis*.)

This tree attains a height of from 40 to 60 feet, with a trunk from 3 to 5 feet and upwards in diameter. It does not occur south of a line drawn from the East Cape to Stoney River, Taranaki, and, although often found solitary or in groups, forms the greater part of the forest in some localities on the west coast of the Kaipara. It has been appropriately styled the New Zealand teak: it is, in fact, closely allied to the Asiatic teak, and affords a timber of great density and extreme durability, closely resembling lignum vitæ in general appearance. In durability it probably excels all other New Zealand timbers.

The growing tree is subject to the attacks of the larva of the puriri moth, which bores holes sometimes three-eighths of an inch in diameter, but the durability of the timber is not directly affected, and the timber is never attacked when worked up.

It is in general use for house blocks in all districts where it can be procured. In the oldest houses taken down in Auckland, the blocks are almost invariably in a perfectly sound condition, after having been in use from twenty to thirty years.

It is extensively used for fencing-posts, which always command the highest price in the market on account of their great durability. Even the sap-wood alone of old trees will last several years, and it is no uncommon thing to see fencing-posts without a particle of heartwood. Heart posts which have been in the ground twenty years are still sound and good.

It has been used for piles for bridges, and in all cases known to me the piles are as good as when first driven, but the dates of erection are too recent to allow of its durability being tested. No instance of its use in marine structures has come under my notice. Small logs, exposed in situations where other timbers have been attacked by teredines, remained untouched for several years.

Railway sleepers, split about 1864 or 1865, were largely used on the Taranaki and Grahamstown Railway about four years ago, and will afford evidence as to the durability of puriri for this purpose at some future day.

On account of its great strength it is highly valued on the Thames Gold Fields for mine props, caps, &c., but the supply is not nearly equal to the demand.

12. TOOTH-LEAVED BEECH: HUTU-TAWHAI.—(*Fagus fusca*.)

The true black birch is a noble tree, found from Kaitia, in the North Island, to Otago, but often local and absent from extensive districts. It ascends the mountains from the sea level to 3,000 feet. The tree is usually from 60 to 90 feet in height, with a trunk from 3 to 8 feet in diameter. In many districts it is abundant, and forms a large portion of the forest. This species is almost invariably termed black birch in Auckland and Otago, red birch in Wellington and Nelson.

So much confusion has arisen from the misapplication of the names "black birch," "red birch," and "white birch," that without actual examination it is difficult to say what tree may be intended in any particular instance. In many parts of the colony, the small-leaved tarata (*Pittosporum tenuifolium*) is called black birch; in others, the name is applied to the tawhero (*Weinmannia racemosa*). In fact, the term "birch" may be regarded as a generic name applied by bushmen to any small-leaved tree, and qualified with the prefixes "black," "white," or "red," at the caprice of the individual, or as may be suggested by the colour of the foliage, bark, or timber.