

*Phormium tenax*

# Harakeke, Flax

The leaf margins vary in colour. Leaves with darker margins produce stronger white fibre called muka. The flower stalk is called kōrari.

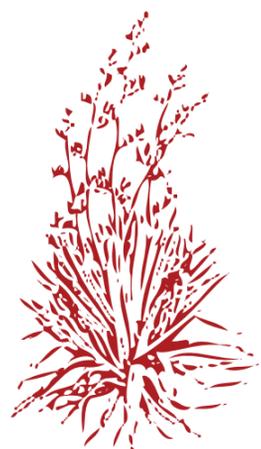
## Traditional uses by Māori

- Muka was used for making ropes and cord.
- Mōkihi - raft for inland waterways - made of Kōrari and raupō (bulrush).
- Freshwater nets and baskets for collecting seafood made from leaf strips.
- Flowers provided nectar and the juice of the leaves has laxative properties.
- Splints for mending broken bones came from the rigid base of the leaves.

*Mussel shells were used to separate the fleshy part of the leaf from the fibre. Commercial extraction of flax fibre in New Zealand began with the invention of flax mills in 1860 and continued until 1970 when synthetic fibres took over.*



Size



*Ripogonum scandens*

# Kareao, Supplejack

The strong, supple vines twist their way in tangled masses to the top of the canopy of the New Zealand forest. Vines can grow up to five centimetres per day.

## Traditional uses by Māori

- Kareao was used for making hīnaki (eel and crayfish pots).
- Young tender shoots were eaten and tasted like beans.
- Watery sap could be blown out of short sections of vine to quench thirst.

*In a mythical fight between Māui and Tunaroa, a monstrous eel, Māui killed Tunaroa by hacking him to pieces. Blood spatters were spread throughout the forest giving bird feathers and berries their red colour. Supplejack grew from the pieces of Tunaroa's tail, which Māui threw into the forest.*



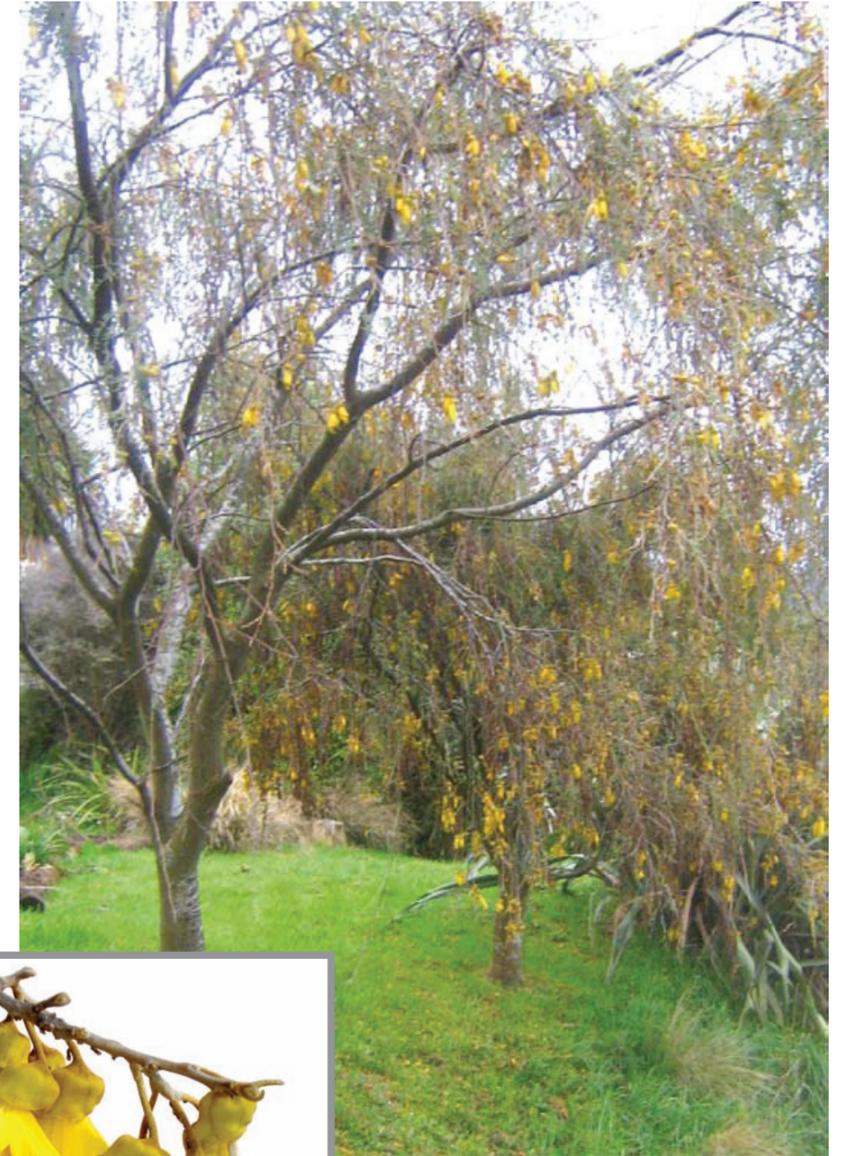
# *Sophora microphylla* Kōwhai

When dry, kōwhai burns hotter than coal. Kōwhai is the hardest native timber of the New Zealand forest. Branches could be steamed in hāngi (earth ovens) and bent into various shapes that were strong and rigid when dry. The seeds are poisonous.

## Traditional uses by Māori

- Roots from the Kōwhai were used for shafts of fish hooks.
- Kōwhai poles were used to stir lures for catching nihomakō (barracouta).
- Kōwhai juice from bark on the sunny side of the tree healed wounds.
- Kōwhai was ideal for fence posts that lasted up to 100 years.

*The Māori calendar begins in midwinter. Kōwhai blossom heralds the beginning of the spring showers. If the blossoms appear on the tree from the lower branches upwards, a warm fruitful season will follow but if the blossoms appear from the crown downwards, a cold wet season will follow. The flowering of the kōwhai is also a sign that kina (sea urchins) and tipa (scallops) are in their prime.*



Size



*Leptospermum scoparium*

# Mānuka, Tea Tree

Mānuka wood is strong and burns with a good heat, ideal for heating stones for hāngi (earth ovens). Mānuka oil has antiseptic properties. Previously considered a weed on hill farms, mānuka oil and honey are now important products.

## Traditional uses by Māori

- Thick roots, hardened in a fire, made clubs for harvesting seals.
- Straight stems of young mānuka made good fishing spears and torches.
- Burning dried brush produced white smoke to drive off insects.
- Also known as tea tree, fresh leaves can be used to make an aromatic tea.
- Bark can be boiled to make a sedative and the oil is an antiseptic.

*The Kilmog is the name of the second hill on the northern side of Dunedin, just south of Waikouaiti. Kilmog is the traditional Southern Māori name for the species of mānuka that grows there.*

Size



Manuka is very similar in appearance to Kanuka which is more common in the region.

*Ficinia spiralis*

# Pikao (or Pingao)

Sometimes called golden sand sedge, Pikao is a sand-binding plant. Its foliage is coloured a brilliant green which turn a golden yellow or fiery orange at the ends. The leaves are organised into tufts and are stiff and curled and rough to touch, which helps to minimise moisture loss in the harsh coastal environment and probably afford some protection from salt spray.

## Traditional uses by Māori

- Prized by Māori weavers as a weaving material – in tukutuku panels, kete (baskets), and in decorative items, as the leaves turn a golden yellow when dried.
- South Island tribes used it to make chest protectors for going into battle.
- The tender young shoots were cooked in a steam oven and eaten.

*Māori legend tells that Pikao is the eyebrows of Tāne-mahuta, the atua (guardian) of the forest, who plucked them off his face and threw them into the sea as an attempt to make peace with his brother, Takaroa, the atua of the sea. Takaroa was so angry he threw them back onto the shore, where the golden sedge grows today on the boundary between the land and sea.*

Size



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*Pteridium esculentum*

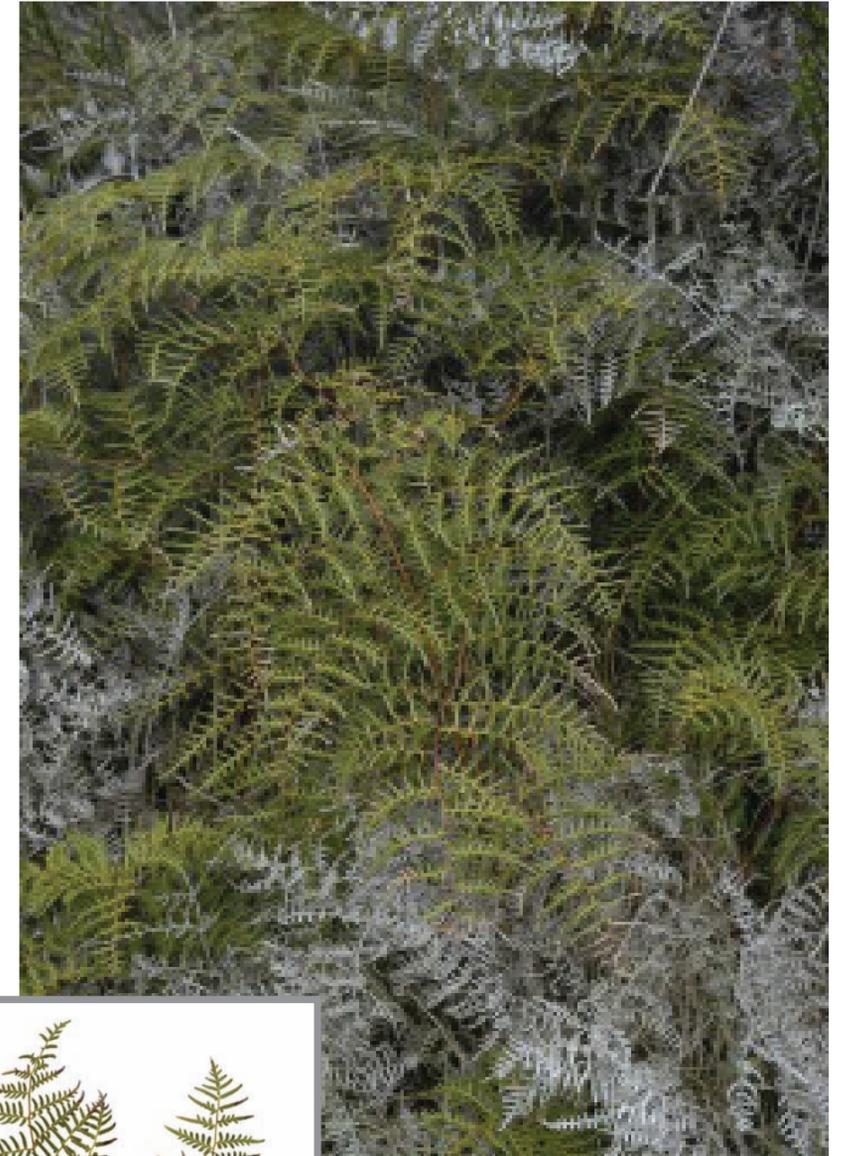
# Rauaruhe, Bracken

This insignificant looking fern is associated with Haumia Tiketike, the god of uncultivated food, and was a very important source of carbohydrate. Roots were harvested all year round, soaked, cleaned and dried before being roasted in embers and often pounded into a powder.

## Traditional uses by Māori

- Pounded roots were made into komeke (cakes) often flavoured with the berries of the hīnau (native tree), or tutu juice or flax nectar.
- Fresh bracken fronds were placed on hot rocks to produce smoke for preserving shellfish. Smoked shellfish were then threaded onto cord and dried for later use or trade.

*The dried fronds are stiff and prickly. When bundled together and placed around the kūmara, the bracken prevented the kiore (Polynesian rat) from getting at the kūmara. The bracken also allowed the air to circulate around the kūmara to prevent it sweating and going rotten.*



Size



*Cordyline australis*

# Ti Kōuka, Cabbage Tree

Harvested in October before flowering, the trunks and taproots of young tī kōuka were cooked in large earth ovens, called umu tī. Fibre was removed leaving a white mealy paste (kāuru) rich in sugars. Related to species in the Pacific Islands, it may have been brought here during early migrations.

## Traditional uses by Māori

- Kāuru provided energy for people collecting muttonbirds in autumn.
- The inner bulb of young leaves was eaten raw or cooked as a vegetable.
- Juice from softened leaves healed deep cracks on hands and feet.

*Kāuru was high in energy and light to carry. As part of the food exchange system of the South Island, the people from Temuka supplied kāuru to the muttonbirders in return for their share of the tītī harvest. The large umu tī of South Canterbury gave their name to the township of Temuka (Te umu kaha).*



Size



# *Podocarpus totara*

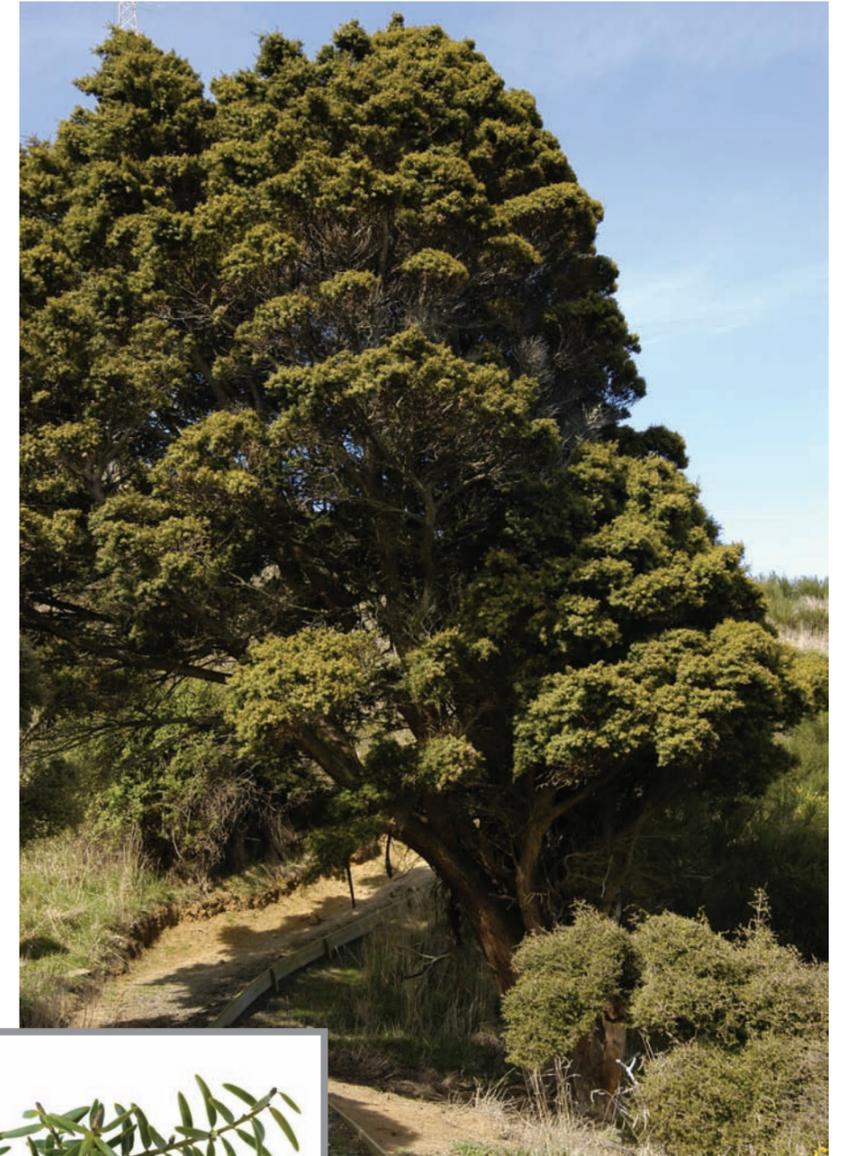
# Tōtara

Tōtara wood is strong, long lasting and durable. The best trees grew on flat land surrounded by forest. The bark comes off in strips. Its spongy texture can absorb oil or be used for padding.

## Traditional uses by Māori

- Strips of bark, tied on poles, made good torches for night fishing.
- Bark strips were used to cover pōhā (kelp bags) used for preserving food.
- Tōtara is a prime timber for building meeting houses and canoes.

*Archaeologists have excavated moa hunting camps and middens in the Catlins that date back to 1000AD. Excavations uncovered bones from 13 different species of moa (a large flightless bird that is now extinct), stone knives and adzes, bone fish hooks and even two unfinished waka (canoes) carved from giant tōtara logs once common in the Catlins.*



Size

