





## Historical cultivation of kumara in New Zealand (notes from "Maori Agriculture", by Elsdon Best)

A number of varieties of kumara were brought to New Zealand by the early Maori settlers about 1000 years ago. These varieties were much smaller than the kumara we grow today - about the size of a finger. Kumara was well suited to growing in New Zealand, and in many regions it was the main food source.

#### Choosing a site

Kumara plantations were often scattered far apart and not always grown close to the village. This may have been to protect the crop from war parties, so that if one plantation was destroyed the others would still provide food.

A site for kumara was carefully chosen. It was considered best if it was in an elevated spot so it wasn't damp, with the field facing towards the sun. The best sites for kumara had light sandy or gravelly soil. If the soil was heavy, gravel was carried from river beds or pits to mix in with the soil - this probably improved drainage.

A kumara plantation was generally only used for a few years, and then was abandoned so that the native bush could regenerate.

## Clearing the land

The land was cleared either by chopping and digging up plants such as fern and manuka, or sometimes by burning. Very large trees were sometimes left. The cleared wood could be left around the edge of the clearing to act as a wind break.

It was particularly important to clear fern and fern roots from the land as these would otherwise grow and compete with the crop.

After clearing, the soil was broken up using digging tools such as a ko (a long sharpened digging stick).

#### Planting the kumara

Planting took place in spring, with the exact day decided according to the phase of the moon. Planting was a team effort with everyone from the chief to the slaves, both men and women, all having a role. Everything from the seed kumara to the ground and the workers was tapu, and there were many rituals associated with the planting of the crop.

The kumara were planted on raised mounds in straight rows running east to west to catch as much sun as possible.

## Caring for the crop

Once planted, no weeds were allowed to grow among the kumara. The crop was checked carefully after storms or heavy rain to make sure they were still firmly rooted and to help drain any puddles on the soil surface.

Because the plantation was considered tapu no one was allowed in the plot except the men who tended it. In some places the penalty for people who walked through the plot was death.

# Harvesting and storing the crop

Kumara were considered mature when the leaves of the plants turned brown.

As with planting, rituals were an important part of the harvesting of the kumara. Only men were allowed to take part, and digging didn't begin until the sun was well up. A kaheru (a short tool) was used to lift the kumara by pushing it into the base of the mounds and turning the soil.

After harvesting any damaged kumara was set aside for the workers to eat - they couldn't be stored as they caused rot. The undamaged kumara were stored in a storehouse below ground level.

The floor of the storehouse was lined with fine gravel or dried decayed wood. Kumara were stacked in overlapping rows, with food tubers and seed tubers kept separate by a barrier.

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