

The Gocks first began planting kumara from spare kumara plants given by their neighbor, Hiko Raniera Wilson<sup>5</sup>. When black rot began to spread and devastated kumara crops<sup>6</sup>, the Gocks developed a disease-resistant strain of kumara, which is now known as Owairaka Red, and gifted them to kumara farmers across Northland. Owairaka Red is now the main commercial kumara crop grown in Aotearoa today.

1 Born 郭武樂 Gock Moo Lok in 1928 in the village of Jook So Yuen, Joe fled a Japan-occupied China<sup>7</sup> with his family in 1940. His father Gock Loy Fat established a market garden in Mangere<sup>8</sup>, which later became known as Kwong Sing.

2 Born 黃蕙娟 Wong Way Gin in 1933, Fay fled a Japan-occupied China<sup>7</sup> with her mother can come to Aotearoa in 1941. Her family ran a fruit shop on Karangahape<sup>9</sup> Road, Tāmaki Makaurau, where Fay began helping out in early teen years.

3 Joe and Fay met when Joe was delivering produce to Fay's family store. They married in 1956. Government restrictions didn't permit Chinese immigrants to own land or build houses back then, so they leased land and started their own growing business from a barn. Overtime, their business grew into the largest market garden in Mangere, all the while creating other horticultural innovations<sup>9</sup>.

4 The Kumara (番薯<sup>10</sup>), derived from the Māori word kūmara, is the Aotearoa sweet potato and one of the most important crops in the country. The kumara carries significant cultural value: way back in the 13th century, the Polynesian ancestors of Māori brought kumara with them as a food plant as they arrived in Aotearoa. It quickly became one of the most important food crops, where infrastructures such as pits and sheds were created for kumara storage. The Kumara even has its own god—Rongo<sup>9</sup>.

5 The initial gift of the kumara led to a lasting friendship between the Gocks and the Wilsons. Joe says, "every time there is a wedding or a tangi (funeral) we go to the marae (the Māori meeting house)<sup>11</sup> and they put us at the head table. They treat us well."

6 From 1947 into the 1950s, black rot<sup>12</sup> (*Ceratocystis fimbriata*) spread across kumara crops on the North Island<sup>13</sup>, where almost all kumara were grown in Aotearoa. It was a fungal disease that rapidly devastated crops, and Northern farmers were scrambling to protect their tubers. Kumara was at the risk of getting completely wiped out by the deadly disease.

7 Also known as the Second China—Japan War, the Japanese Invasion of China was the largest Asian war in the 20th century, running from 1937—1945. Around 20 million people, mostly civilians, were killed.

8 The Gocks, among their many achievements, were the first to put product stickers on fruits and vegetables, the first to grow seedless watermelons in Aotearoa, and patented polystyrene boxes to export broccoli and rhubarb.

9 Rongomātāne<sup>14</sup> is the custodian of the kumara and protector of crops. In Māori creation legends, Rongo was a son of Rangi (sky) and Papa (earth). When Rangi and Papa were separated to let daylight into the world, Papa took Rongo into her belly to hide until the storm passed. Symbols of Rongo were often placed in crop fields for a good harvest, and the first kumara were buried as an offering to Rongo.

10 番薯 (faan1 syu4 in Cantonese, fān shū in Mandarin) is the Chinese sweet potato. Both my parents are from Guangdong, the province where most Chinese market gardeners, and largely, Chinese immigrants, hail from. While my parents were not market gardeners, I remember growing up in my grandparents' house in Guangdong, where 番薯 was always a staple at breakfast. It was the most humble food, the only source of sustenance during famines of the past. Whether steamed plain in a bamboo steamer or fire-roasted from a street cart, the aroma alone carries a multitude of emotions billowing into my lungs. No matter where, the 番薯 and the kumara find themselves as extensions of memories and container of stories.

# Joe<sup>1</sup> and Fay<sup>2</sup> Gock<sup>3</sup> were two Chinese refugee—turned—farmers that saved the Kumara<sup>4</sup>



FIG. B A market garden on the south-eastern side of Māngere Mountain, 1956. Māngere was historical Aotearoa's largest district of Chinese market gardeners.



FIG. C Karangahape Road in the 1900s. Now known as "K road," one of the most famous roads in Aotearoa as a cultural center.

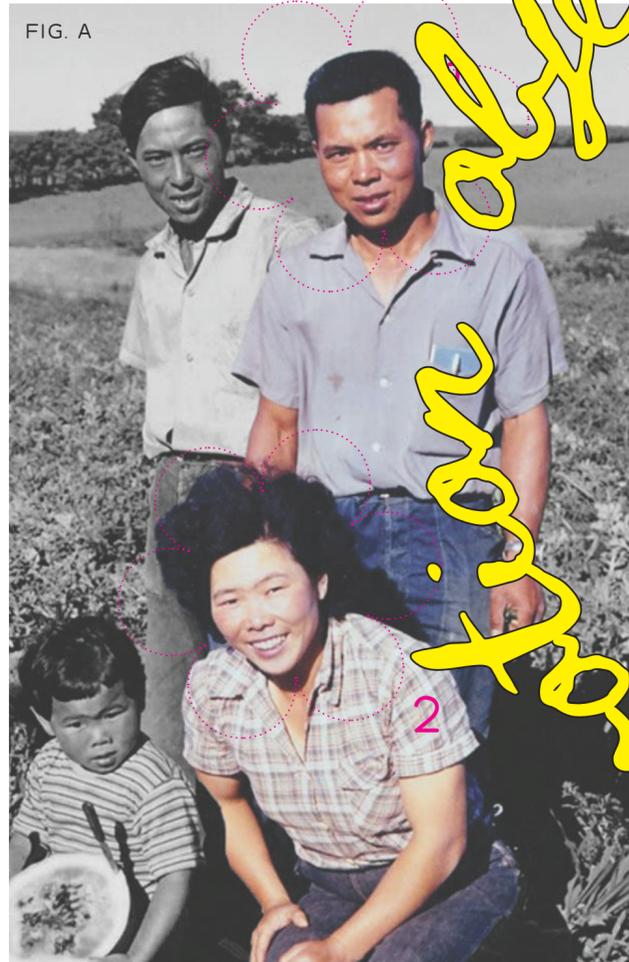


FIG. A

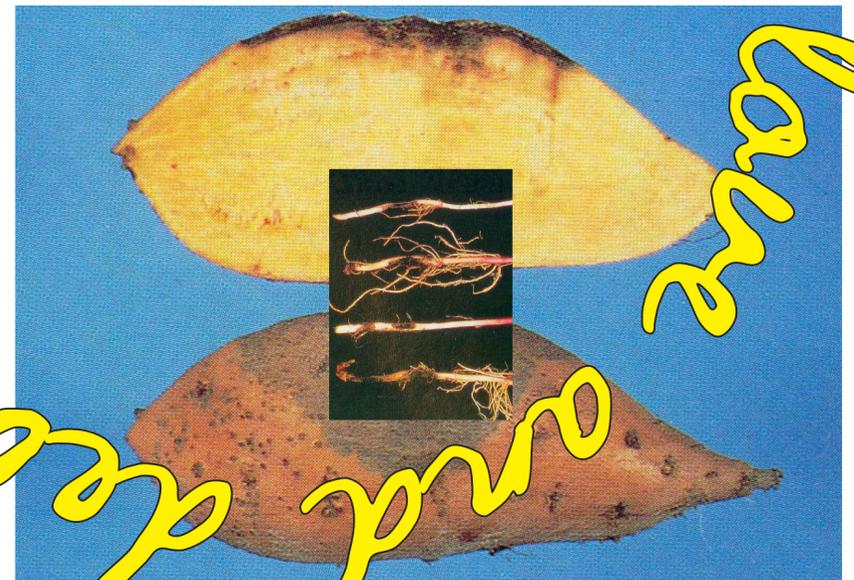


FIG. F Black Rot Disease Symptoms in a kumara



FIG. D A carving of Rongo, the Māori god of kumara

## THE HOME GARDEN by R. G. FALCONER

### BLACK ROT IN KUMARA

Some time since, the Māori people in North Auckland and the coastal strip of the Bay of Plenty of the North Island produced crops of kumara, which not only formed part of their diet but also constituted a fairly high percentage of their income. The produce was distributed throughout the North Island and on numerous occasions exported to South Island centres.

Today it could be confidently stated that owing to the ravages of black rot, production by the Māori people has declined sharply. With this in mind it is proposed to emphasize the need by growers to take more care in the selection of seed for propagational purposes and a strong recommendation that rotational cropping be observed, especially where there is any suspicion that the disease may be present.

Black Rot may occur if present in the soil, on any of the underground parts of the plant. On the kumara the disease produces dark or blackish, somewhat sunken, more or less circular spots on the surface.

In the early stages these spots are small and nearly round, but under favourable climatic conditions they enlarge until frequently nearly the whole kumara is involved. Often in the centre of the spots will be seen more or less circular areas, from 1/2 to 1/4 in diameter, in which may be found fringed bodies of the fungus. The surface of the infected spots has a somewhat scabrous texture and the tissue just beneath the infection is usually a greenish colour.

On the plants the infection begins as small black spots which gradually enlarge until the whole of the stem is rotted off and on numerous occasions it extends up the stem to the surface of the soil. This is often noticed during the early stages from two to three weeks after planting has been completed.

It is very important to remember that if Black Rot kumaras are used for seed the plants derived from the parent tuber will in all probability be infected. Another very important point to note is that Black Rot infected kumaras, when cooked, have a very disagreeable taste and a peculiar odour instead of the pleasant one which is met in the produce, as the effect on the market is depressing together with the fact that the disease is being transferred from one area to the other.

It is equally stated that all varieties of kumara are subject to this trouble and methods of control would be similar. The Department of Agriculture have in conjunction with the Department of Science and Research prepared a very comprehensive booklet which is available on application to the Department of Agriculture, and it is suggested that any Māori grower who is concerned or suspicious that his crops may be infected should make application to the nearest office of that department, where he will be given every assistance and co-operation by field officers, who are at present keen on their duties to assist if possible to eradicate Black Rot in kumaras.

They suggest that selected tubers should be dipped in 5% Dichloro (Phyton 33) at 10 to 100 gallons of water before storing in clean boxes which have been dipped or thoroughly sprayed with commercial formalin at 1 gallon to 50 gallons of water.

In the case of the Māori pits or stone houses which are common in the Mangere coastal area, the above preparation would still apply. The pits in this case should be thoroughly sprayed before storage takes place. When propagating beds are being prepared for planting all introduced material, including stable manure, straw, hay, soil or sand should be disinfected with Phyton 33, at 10 to 100 gallons of water.

It is sincerely recommended that all Māori growers who have the opportunity to read this foregoing notes endeavor to exercise the very necessary control measures in the interest of their people who have for many years been so successful in producing such an economical crop, which has over the years brought about stability in various remote Māori economical areas.

FIG. G A page from the Māori magazine *Te Ao Hou* (The New World) describing the impact of black rot in kumara



FIG. E The Gocks with the Māori Queen Te Atairangiāhau at the opening of new Pukaki marae, 2004.

subject of ten years ago

