

Kiwi fruit

low in price, rich in vitamin C and plentiful in supply...

The kiwi fruit is a many-seeded berry fruit about the size of a large egg, furry and brown on the outside, bright green inside and with a pattern of black seeds radiating from a creamy white oval core. Talking about descriptive and humorous names, the Chinese peasants call it the 'golden hairy goat's testicles'; our New Zealand neighbours name it 'kiwi' after their bird kiwi, whose brown furry coat resembles the skin of this fruit; the French call it 'vegetable mouse' (*souris vegetale*).

The plant originated in east Asia and was known to the inhabitants of the region since ancient times. Several species were found growing naturally on the edges of the Yangtze valley in China. However, it was first grown commercially on a large scale in New Zealand.

The plant is a climber, previously known botanically as *Actinidia chinensis*, now *Actinidia deliciosa*, since there are significant differences between the original wild plant and the cultivated one. The genus name *Actinidia* alludes to the styles of the flowers that radiate like a wheel.

It is more than a hundred years since the first seeds were taken from their native China to the countryside of New Zealand where the vines first fruited in 1910. All varieties of New Zealand kiwi fruit are believed to be descendents of those first vines. In the beginning, the common name of the fruit was Chinese gooseberry (though it is not related to the gooseberry). When New Zealand started to produce it commercially in the 1940s, the fruit became a familiar sight in greengrocers all over the world with the official trade name 'kiwi', and 'kiwi' it remains in the English speaking world today. New Zealand's success in the growing and marketing of this fruit didn't go unnoticed by the rest of the world; other temperate-zone countries such as Australia, France, Italy, Japan, South Africa, the USA and others, began to import and grow the vines with great success.

Kiwi fruit will grow in all temperate parts of Australia. The plant requires a minimum of some 6 to 700 hours below 7°C to form fruit; where winter temperatures do not fall low enough, fruit may not form; extremely high summer temperature may also affect growth. To produce fruit, both a male and a female plant is required, flowers from male plant pollinate flowers on female plant. Just one male per approximately eight female plants is needed for successful pollination and plants of both sexes must flower simultaneously. Male flowers produce pollen from the numerous stamens, female flowers also have stamens but they do not produce functional pollen. Female flowers have a well-developed ovary with long sticky stigmas in the centre; ovary will develop into the fruit. When the plants are not in flower or fruiting, it is difficult to tell the male from the female. However, when in flower, they can be differentiated easily.

The good news now is that there are self-fertile varieties which yield smaller fruits, and also it is possible to buy plants that have a male and female grafted to the same plant.

Kiwi flowers, small and white, appearing in early summer, are quite fragrant. The leaves are large and heart-shaped. The fruits continue to mature all summer and are ready to harvest in late autumn through to winter. The fruit is very refreshing and rich in vitamin C; it is said that a single fruit is enough to satisfy the minimum daily requirement. Fruits can ripen after picking, when soft to the touch, they are ready to eat. There are approximately 60 varieties, they may have seeds or no seeds; fuzzy or smooth skin of green, brown, golden, purple, or red colour; and green, gold, red and purple flesh. The most familiar fruits are the fuzzy ones, they have brown fuzzy skin, roughly the size and shape of a large egg, brilliant bright green on the inside with the kiwi's distinctive ring of black seeds. Hardy kiwis are one of the newer vines developed for cooler season growing, they are hairless and are tolerant of conditions that the fuzzy kiwi cannot withstand. Golden kiwis have beautiful smooth bronze skin, their flesh is anywhere from bright green to a clear, intense yellow, some even include a splashy dash of red around their ring of black seeds. Arctic kiwis are even more hardy, the toughest kiwis of all, their vines have attractive pink and white variegated leaves. Purple kiwis are a sight to see, with a skin of a lovely deep red and an inside that can hit the most beautiful tone of its namesake colour, they are typically grown by hobbyists, very rarely grown commercially for food. Silver vine kiwis prefer the mountainous areas of China and Japan over the temperate tropics of New Zealand, these types of kiwis are natural climbers; the fruits themselves take on more of an acorn shape than the traditional kiwi egg look, but taste every bit as sweet and delicious, typically being used for everything from their flesh to their juice to their leaves and buds, which are used medicinally or in tea infusion in some areas of Asia.

Kiwis in your backyard? Yes, it is possible to grow some species – eg. the kiwi berries species *Actinidia arguta* – in your backyard, you need to pick a self-fertile variety, unless you have space for multiple male and female plants. Grow them on a strong trellised wire fence and prune them vigorously to keep them in bounds. They can grow in small places such as along the edge of a garden or fence. The kiwi berries actually resemble grapes more than kiwis, growing in similar bunches off their vines, their skin is smooth and paper thin, green, brownish or purple, and befitting of their size and taste, they are known as grape kiwi, baby kiwi, cocktail kiwi or dessert kiwi. Kiwiberry 'Issai', a self-fertile variety from Japan is a fast-growing vigorous perennial climbing vine, very hardy, ideal for small backyards and produces smooth hairless grape sized fruits with the same delicious taste of the larger kiwi fruit; its attractive pink variegated foliage and fragrant flowers add interest to the landscape.

Bright green slices of kiwi fruits, together with red strawberries, make a 'picture perfect' on top of cheesecakes and pavlovas.

Why the Chinese did not perceive the possibilities of this fruit remains a mystery!

Fruits of different sizes, shapes, flesh and skin colours



Female flower has white centre filaments (made of styles fused at the base of the flower). Male flower has tuff of pollen anthers