



New Zealand horticulture industry **April 2012**

New Zealand's horticultural sector combines natural advantages with human innovation and world-leading technology to produce and export a wide variety of premium fruit and vegetable products. Key strengths include New Zealand's clean, green environment, diverse geography and climate, and excellent soil quality.

The sector is based largely on the export of kiwifruit, pipfruit, wine and fresh and processed vegetables. Over the past 20 years, horticulture exports have grown to NZ\$2.2 billion. Kiwifruit and wine are the biggest earners, each with export values in excess of NZ\$1 billion. The area of horticultural crops has also increased by 40 percent to 121,000 h.a. during the past 10 years. The horticulture industry is New Zealand's sixth largest export industry and the industry, including domestic sales, is worth an estimated \$NZ4.7 billion.

Geographically isolated and with stringent biosecurity regulations, New Zealand is free of many of the world's major pests and diseases. The industry is committed to ensuring fresh and processed foods are safe, farm production systems are sustainable, and the use of agrichemicals is minimised. Monitoring and traceability systems provide further quality assurance.

Growers are continually seeking ways to further enhance the products they sell to the international market. Research is also producing fruits with greater health benefits and consumer convenience, such as citrus with easily peeled rind, seedless fruit and fruit of increased size. For example, ZESPRI® Gold kiwifruit, a natural development by New Zealand kiwifruit growers is a better source of vitamin C than supplements.

As well as fresh produce, New Zealand is a major exporter of processed fruit and vegetables. Leading technology, such as snap-freezing vegetables to protect them from nutrient loss and to retain flavour, gives this sector a competitive advantage.

New Zealand is pioneering the development of organic fresh and processed fruit and vegetables.

New Zealand also has a small and specialised flower industry. Its strengths include the quality of flowers and bulb exports, and an ability to supply the northern hemisphere during its off season. The industry's focus is on high quality and increasing the quantities of vibrantly coloured, well-formed new generations of existing varieties.





Fast facts

- New Zealand's fresh fruit exports generally supply northern hemisphere markets in their off-season, providing around NZ\$1.5 billion in export returns each year.
- In 2011, the key export markets for New Zealand fruit and vegetables were Japan, with 80 percent share, the European Union (17 percent), Australia (9 percent), Taiwan (7 percent) and China (6 percent).
- New Zealand's horticulture exports generate more than NZ\$3.3 billion each year. Top horticulture export destinations are Australia, with 21 percent share, Japan (15 percent), the United Kingdom (11 percent), the United States (11 percent) and the European Union (9 percent).
- Processed fruit exports (e.g. apple juice, frozen fruit and jams) generate over NZ\$100 million each year.
- Seed exports total approximately NZ\$150-180 million per annum and comprise grass and clover seeds, seed and dry peas, forage brassica seed, specialist vegetable seed and various oilseeds from 60-70,000 h.a.
- There are approximately 700 wineries in New Zealand, ranging from small wineries to large company owned businesses. Around half of wine grapes are grown under contract for wineries by independent growers, with the rest grown by wineries themselves.
- New Zealand has approximately 2,500 commercial growers, growing a wide range of vegetable crops on 50,000 hectares of land. Main regions are Pukekohe, Waikato, Gisborne, Hawke's Bay, Manawatu, Wanganui and Canterbury.
- While the majority of workers in the horticulture sector are New Zealanders, the sector needs to source extra labour of up to 8,000, for harvest seasons.
- Exports of organic produce from New Zealand exceed NZ\$170 million and the total domestic market is estimated to be NZ\$450-530 million.
- Total investment in the horticulture industry is calculated to be approximately NZ\$38 billion, a substantial reduction from the NZ\$45 billion in 2009.





Food safety

New Zealand has sophisticated food certification and tracking systems in place – from a source to consumer.

A range of agencies co-operate to maintain New Zealand’s world-leading reputation for food safety:

- The Biosecurity New Zealand is the lead agency for ensuring unwanted pests and diseases are kept out of New Zealand (www.biosecurity.govt.nz).
- The Environmental Risk Management Authority (ERMA) regulates the introduction of new species of plants and animals (www.erna.govt.nz).
- The New Zealand Food and Safety Authority protects public health (www.nzfsa.co.nz).

Sustainability

Environmental sustainability is a key focus for New Zealand’s horticulture industry. A range of programmes are successfully combining economic criteria, such as improved yield and quality, with environmentally friendly and sustainable production practices.

A project run by the Ministry of Agriculture and Forestry, the Sustainable Farming Fund (SFF), invests in farmers, growers and forester-led projects that deliver economic, environmental and social benefits to New Zealand’s land-based primary industries.

PipSure is the apple and pear industry’s integrated fruit production programme, under which growers monitor pests and beneficial organisms and use biological controls to sustainably produce top quality fruit. The Apple Futures Programme aims to produce apples and pears that return next to no detectable chemical residues. All New Zealand pipfruit growers are registered under the PipSure programme, except for the 10 percent who grow organically.

New Zealand Good Agricultural Practice (GAP) is a quality assurance programme that provides a traceable and accountable system, from crop to customer, for the production of fruit, vegetables and flowers. The programme is benchmarked against international quality assurance programmes. By meeting the standards required by the programme, suppliers demonstrate that their products are of high quality, produced in a sustainable manner and meet stringent food safety standards.





Organics

Organic systems production is an important section of New Zealand's horticultural production although currently a relatively small portion of total horticultural production. New Zealand's fertile soils, clean water and outstanding animal and plant health status make it an ideal place to grow organically. The industry body, Organics Aotearoa New Zealand, has set a target of growing the sector to \$1 billion by 2013, with horticultural products poised to be a key component of increased production.

New Zealand has approximately 80 organic pipfruit orchards, which is a 40 percent increase from 2006. Around 5 percent of New Zealand's exported kiwifruit and pipfruit is organic. Organic vegetables (i.e. peas, sweet corn, carrots, potatoes and onions) are also high earning exports. Production of organic avocados, citrus fruit, berry fruits, stone fruit and feijoas is also steadily increasing.

Organic certification is voluntary in New Zealand but provides assurance that goods have been produced to recognised organic standards. New Zealand has four internationally recognised organic certification agencies:

- Bio-Gro New Zealand - www.bio-gro.co.nz
- AssureQuality - www.agriquality.com
- The Bio-dynamic Farming and Gardening Association - www.biodynamic.org.nz
- OrganicFarmNZ - www.organicfarm.org.nz

Flower industry

New Zealand's climate, clean air, water and intensity of light combine to create excellent conditions for the production of high quality flowers. Other strengths include skilled and innovative growers, sophisticated technologies, and scientific research and development along with entrepreneurial marketing.

Exports include cut flowers, unique native greens and foliage, bulbs, as well as flower, fruit and vegetable seeds. The cymbidium orchid has been the number one crop for some years, but commercial industries have also developed in calla lilies, sandersonia, nerines, lilies and peonies. There are approximately 990 commercial flower growers whose produce is worth an estimated wholesale value of NZ\$270 million. New Zealand growers have been particularly adept at taking exotic species, such as calla lilies, adapting them to local conditions and developing improved varieties of colour, size and shape. Eight exporters handle approximately 95 percent of New Zealand's flower exports.

Bulb and seed production increased nearly four-fold in the last decade with New Zealand exports now found in over 40 countries and earning \$93.7 million in 2008. Japan, the Netherlands and the United States are key buyers of bulbs, using New Zealand exports to fill the market gap in northern hemisphere production for early and late season supply. Growth in





seed production reflects New Zealand's strengths in effective crop pollination and high quality production and harvesting systems.

Innovation and invention

- New Zealand government encourages innovation and invention in the horticulture sector. For example, the Primary Growth Partnership is a government-industry partnership, which was launched in 2009. The partnership has pledged a staggering NZ\$477 million towards cutting-edge primary sector innovation.
- The New Zealand government research institute, Plant and Food Research, in association with New Zealand's Avocado Industry Council (AIC), has tested and proved a technology called Dynamic Controlled Atmosphere (DCA). The technology can commercially be used on avocados to prevent the fruit from ripening while in transit.
- The Ministry of Science and Innovation is funding a researcher to combat the PSA disease that has ravaged New Zealand's NZ\$1 billion kiwifruit industry. The research is aimed at combatting the spread of the bacterium.
- New Zealand pioneered the production of avocado oil through developing technology to stabilise the oil. New Zealand avocados contain the highest level of beta-sitosterol, which has been proven to lower cholesterol absorption.
- HortResearch is developing new commercial varieties of baby kiwifruit, the size of a large cherry. The fruit has a super-sweet flavour and can be eaten whole like a grape.
- Plant and Food Research has developed the Purple Heart Potato, which has purple toned flesh and deep purple skin. The colour comes from anthocyanins, which are strong antioxidants.
- In partnership with Southland flowers, Plant and Food Research have developed 'Showtime Diva', a red Gentian that provides an alternative to the natural deep blue. New varieties being tested have longer stems, good yields, a wide range of flowering times, stronger disease resistance and longer vase-life.
- A Hastings fruit handling company has developed a next generation fruit bin-filler, which packs twice as many apples in the same time as existing conventional packing systems.
- New Zealand was first to the global market with ZESPRI™ GOLD, the new, sweeter kiwifruit variety.
- Envy™, developed by ENZA, is a new apple that has been sold commercially since 2009, and was developed by breeding Royal Galaxy apples with Braeburn apples. The apple is high in flavour, has high juice content, stores for longer and is available 12 months a year.





Industry contacts

Avocado Industry Council
www.nzavocado.co.nz

Blackcurrants New Zealand Ltd
www.blackcurrant.co.nz

Horticulture New Zealand is the main industry group, representing 7,000 fruit and vegetable growers.
www.hortnz.co.nz and www.vegetables.co.nz

New Zealand Boysenberry Council Ltd
www.boysenberry.itm.org.nz

New Zealand Chestnut Council
www.nzcc.org.nz

New Zealand Flower Exporters Association
www.nzflowers.com

New Zealand Buttercup Squash Council
www.nzbsc.com

New Zealand Tamarillo Growers Association
www.tamarillo.com

Organic Products Exporters of New Zealand
www.oanz.org.nz

Persimmon Industry Council
www.nzpersimmons.org.nz

Pipfruit New Zealand works with growers, helping them to be the best pipfruit producers in the world and to be internationally competitive.
www.pipfruitnz.co.nz

Summerfruit New Zealand (peaches, nectarines, cherries, apricots and plums)
www.summerfruitnz.co.nz

