



KIWIFRUIT

MANAWATŪ CROPS //
UNLOCKING LAND
DIVERSIFICATION
OPPORTUNITIES

CEDA | **MANAWATŪ**

CENTRAL ECONOMIC
DEVELOPMENT AGENCY

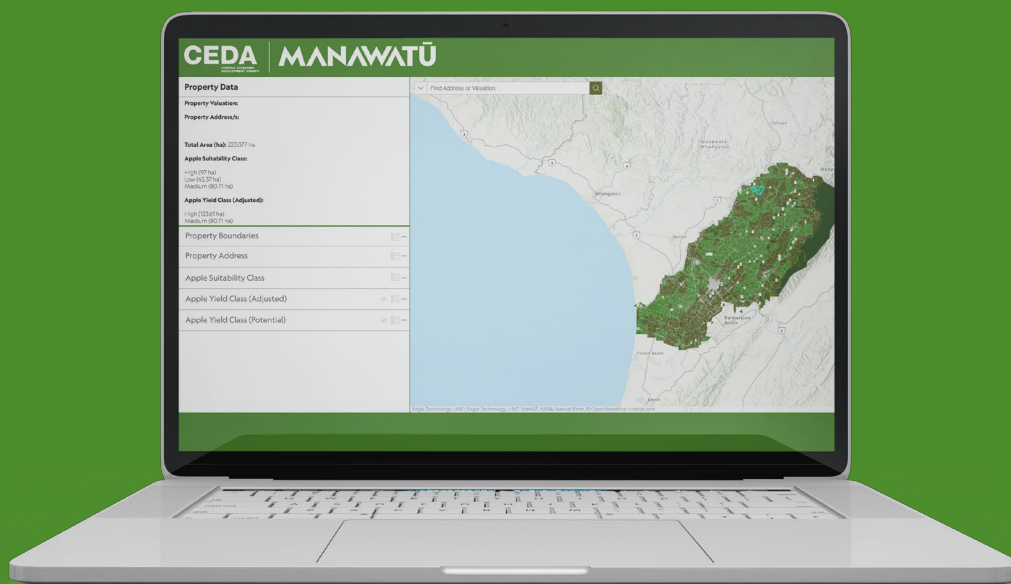
KIWIFRUIT PRODUCTION

The kiwifruit industry in New Zealand consists of around 2,800 growers utilising 14,500ha to produce an approximate annual yield of 158m trays of kiwifruit resulting in an orchard gate return of around \$120,000 per hectare. This is made up of 61% gold variety and 37% green.

Within Manawatū there are significant areas that could be suitable for kiwifruit growing from both a climate and soils perspective. This opportunity is also represented in Zespri's **Climate Change Adaptation Plan**, released in November 2022. This plan contains 41 key actions, with specific mention of expanding kiwifruit production into new regions, such as in the lower North Island. The aim of this is to protect the industry from the impacts of climate change and provide more nationwide resilience to extreme local weather events. Action 19, which was due to be undertaken from 2023 outlines, "Model climate impacts and adaptation in New Zealand and overseas growing regions". This is particularly relevant to Manawatū and is supported by work done by Plant & Food Research as part of their Sustainable Land Management and Climate Change work. This fact sheet, **Climate Change Impacts on Kiwifruit**, shows significant areas in the lower North Island could be suited to kiwifruit crops.

Although climate change will make some northern regions less suited or unsuitable to production of current cultivars of kiwifruit, the recent Environmental Protection Authority approval (May 2024) for continued use of hydrogen cyanamide to encourage bud break in kiwifruit reduces the urgency for the industry to diversify to other regions. While the Manawatū climate will provide some challenges, particularly wind, and areas with suitable soils that are not prone to flooding in the future need to be selected, investment in shelter systems, along with low environmental impact growing systems, including irrigation, will minimise the impacts of climate events. Further frost data from Palmerston North indicates there could be a risk of frost so warmer sites with good air drainage should be selected and shelter systems designed to reduce frost risk.

Note: All currency was converted to NZD on 15/08/24 unless stated otherwise.



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ACCESSING THE KIWIFRUIT MARKET

Supply green or organic green fruit for export with Zespri

From Māori land supply fruit to export through the Māori Kiwifruit Growers Association

ACCESSING THE KIWIFRUIT MARKET

Zespri merchandised 160 million trays of kiwifruit from New Zealand representing 87% of total global production.

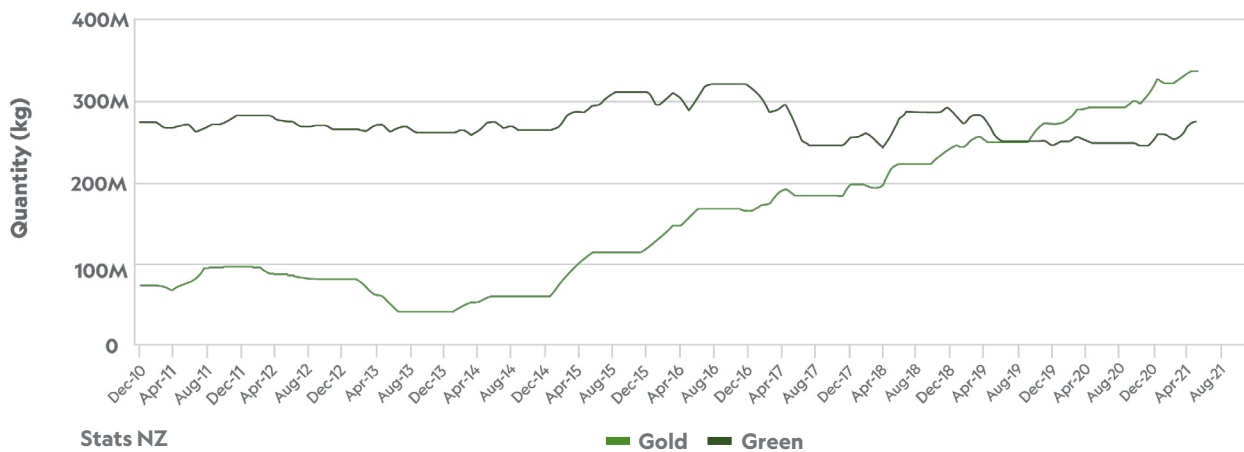
Of the New Zealand production, 60% was gold with the rest green along with a small quantity of the Ruby Red variety and other types. As per the 2023-24 year financial results published by Zespri, the average orchard gate return for Sun Gold was \$138,000/ha back from highs of over \$170,000/ha in recent years, with green at \$58,000/ha, a return of \$9.55 per tray for green and \$12.53 for organic green in the 2023-24 year.

The following graphs show steady growth in export sales values and volumes for gold kiwifruit and static value for both value and volume for green kiwifruit in recent years.

ANNUAL GOLD AND GREEN KIWIFRUIT EXPORT VALUES (\$) DECEMBER 2010 - NOVEMBER 2021

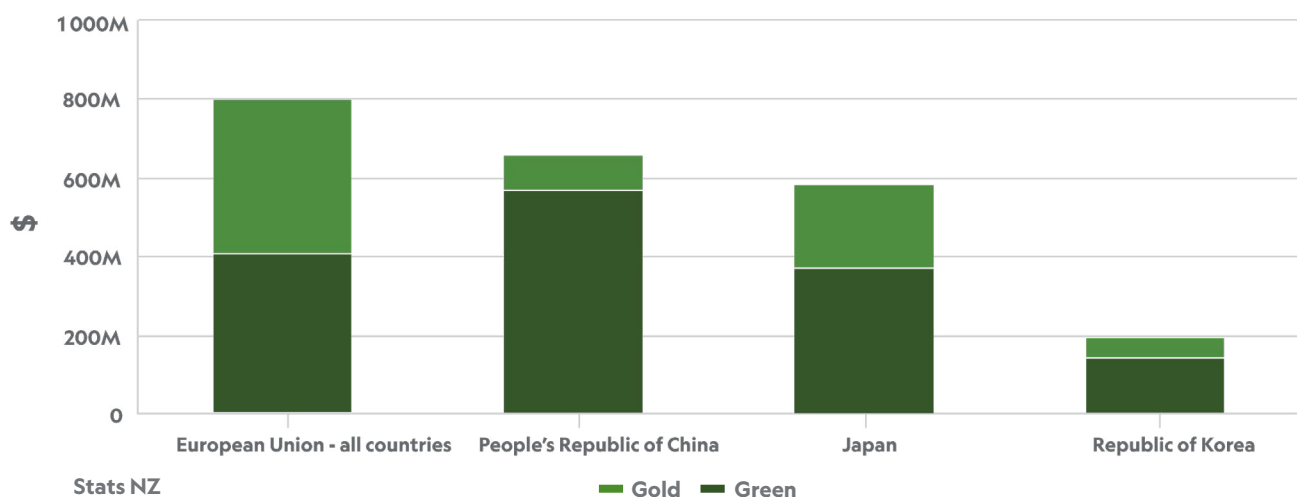


ANNUAL GOLD AND GREEN KIWIFRUIT EXPORT QUANTITIES (KG) DECEMBER 2010 - NOVEMBER 2021

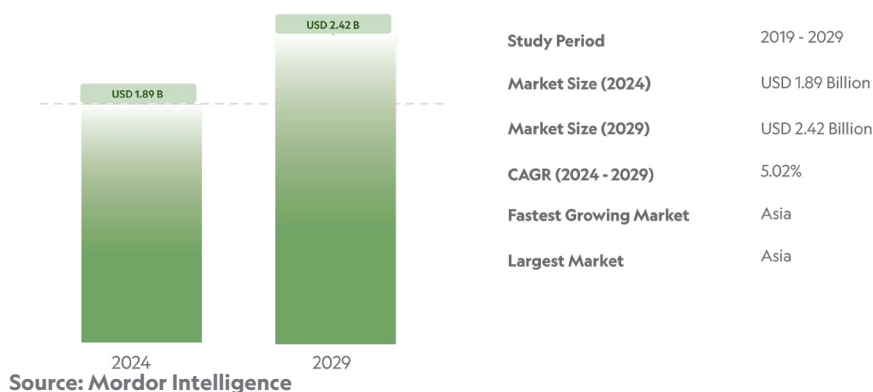


New Zealand exports kiwifruit to a large number of regions and countries. The key destinations are shown by these 2021 figures with a clear focus of gold kiwifruit to Asian nations. Mordor Intelligence predict significant further growth from \$3b NZD in 2024 to \$4b NZD in 2029 with a large proportion of that to Asian markets and a CAGR of 5%.

ANNUAL GREEN AND GOLD KIWIFRUIT EXPORT VALUES (\$) TO TOP 4 DESTINATIONS YEAR ENDED NOVEMBER 2021



KIWIFRUIT MARKET MARKET SIZE IN USD BILLION CAGR 5.02%





KIWIFRUIT PACKING, STORAGE AND PROCESSING

Currently there is minimal capacity to pack and cool-store kiwifruit in Manawatū.

Although there are cool-store facilities residing within Manawatū, an increase in demand for these services may require investment in expanding their operational capacity. As viability requires scale through export ports, farmers may consider the most economic option to be transporting kiwifruit direct from orchard to the Bay of Plenty for packing, storage and export, as 94% of New Zealand kiwifruit is currently shipped from the Port of Tauranga.

Comparatively, kiwifruit currently grown in the Whanganui region is trucked to the Bay of Plenty to pack and store. The absence of packing facilities within region is not necessarily inhibiting to potential growers as kiwifruit produced around the country are already trucked significant distances in bulk bins prior to packing facilities elsewhere in the country and it is possible to maintain good fruit quality with good logistics and cool chain management. Further research work could be undertaken to develop improved harvest, including automation of harvest, and post-harvest handling and transport services to ensure the fruit quality of bulk fruit from Manawatū is preserved through to market reducing the need for investment in packing.

There would need to be a significant area of kiwifruit grown in the region to justify investment in postharvest infrastructure suited for a single crop within the region. Although, if there is significant demand for postharvest infrastructure in combination with neighbouring regions of Whanganui and Horowhenua, Manawatū may serve as a great central location.



KIWIFRUIT DISTRIBUTION AND MARKETING

Zespri are responsible for the global marketing of kiwifruit and export supply.

The Māori Kiwifruit Growers successfully undertook export of kiwifruit in conjunction with Zespri to Hawaii in 2023 and there may be opportunities for Māori land to supply fruit into this pool in future or for Manawatū to produce fruit with characteristics that differ sufficiently to be segregated in market. The opportunity for supply to the domestic and local market is limited as there are significant volumes available from other regions in the country. Markets for reject kiwifruit may be available as animal feed currently. Therefore, there may be scope to link with other foods to set up processing opportunities in the future.



DIVERSIFICATION TO INCLUDE KIWIFRUIT

Kiwifruit are well suited to free-draining silt loams.

These soil types are common in Manawatū and many farms have some land of this soil type. The contour needs to be relatively flat to enable machinery operation and structures to be installed. The major requirements are to select sites which are not too wet, or exposed to unseasonal frosts or strong winds. Irrespective of site, some shelter will be required with many kiwifruit orchards now opting for artificial shelter and fully covered crop canopy. Smaller areas may fit into a farm system diversification if the farmer is working in collaboration with other farmers or plans to be an owner operator, a fully commercial scale orchard is in the order of 25ha¹ with a good orchard manager responsible for 60+ ha. Establishment costs vary significantly depending on orchard infrastructure from around \$150,000 to \$400,000 per hectare and for some cultivars there is a license fee. The time frame until the orchard produces fruit needs to be considered with full production reached in four to five years. Returns differ depending on the cultivar with gold returning in the order of \$140,000/ha gross while green are returning around \$60,000/ha gross² with orchard working expenses of around \$50,000/ha, breakeven is usually around eight to 10 years after establishment.

Farmers will also need to be mindful of the seasonal labour requirements particularly for harvest, but also for pruning, pollination and thinning. Diversifying to include kiwifruit in Manawatū may mean there is a labour pool available for pruning when other seasonal activities such as meat workers, forestry or calf rearing are not at their peak. Labour requirements for harvest may be best met by a combination of local labour and pickers from outside of the region.

Farmers may also need to invest in some equipment such as an orchard tractor, sprayer and mowers with sufficient base area to justify this investment.

Green kiwifruit are probably best considered for the region as, with the increase in the area of gold in the key growing regions, packhouses are actively seeking supply to extend the packing season later and to source green kiwifruit from regions which may be slightly later harvested than the Bay of Plenty. Lower land values than in the Bay of Plenty, and no requirement for a licence to grow green also mean green could be a better fit in the region. The higher returns for organic green kiwifruit compared to green may mean organic is a viable option in the region. A collaborative group of growers with around 120ha of green kiwifruit may be able to develop a good long-term management and/ or supply agreement with a packhouse in the Bay of Plenty.

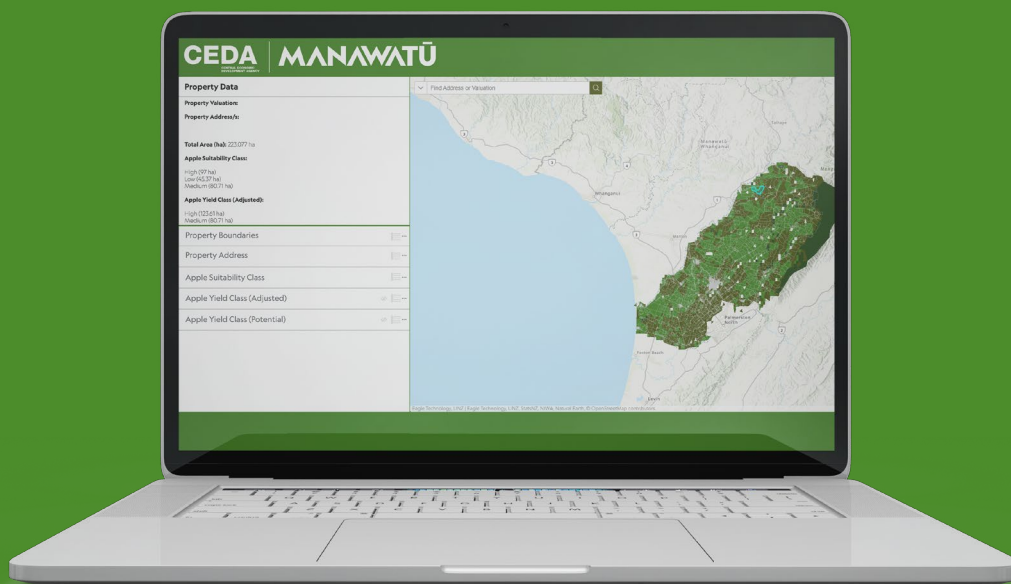
1. <https://www.tupu.nz/en/fact-sheets/kiwifruit>

2. <https://canopy.zespri.com/content/dam/new-canopy/nz/en/documents/public/news/publications/kiwiflier/KF-459-June-24.pdf>



OTHER CONSIDERATIONS

Farmers will also need to consider how they integrate this crop with their existing animal grazing requirements.



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KIWIFRUIT OPPORTUNITIES IN MANAWATŪ

- >> The soil and climate in Manawatū suit kiwifruit production and with the impact of climate change on northern orchards there may be opportunity to diversify within farm in the region.
- >> The industry is well established with Zespri marketing the crop and providing good and relevant information to farmers.
- >> The fruit can withstand transport and packhouses in the Bay of Plenty may be keen to secure supply of green kiwifruit to extend their packing season.
- >> Growers could work collaboratively to get to a scale which justifies employing a skilled orchard manager and other seasonal personnel may be available for pruning with pickers brought in from the Bay of Plenty.
- >> Land prices are lower in Manawatū and a viable unit may not require the investment in gold kiwifruit with higher returns but a high license fee.
- >> Garlic can fit well into a farm system either in a pasture renewal or in a long term cropping system.
- >> Green and organic green kiwifruit may be well suited to farm diversification on suitable soils with good air drainage in Manawatū.



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