

# Profile: Vince Ngo, Russell Road Farm: A rising star in WA strawberry production

Helen Newman, Berry Industry Development Officer, Agricultural Produce Commission, WA

Vince took over management of the family farm in 2017 and has big plans when it comes to adopting new technology and expanding his premium strawberry business.

Vince's family originally grew tomatoes in Kingsway north of Perth before the area underwent urban development in the early 2000's. The family moved to their Russell Road property, 30 kilometres south of Perth, in 2003 and expanded to a nearby site on Thomas Road in 2005. They currently have 160,000 strawberry plants across both farms with a focus on premium quality. They also grow zucchini, garlic chives, daikon radish, and ginger and plan to grow watercress in the future. A large proportion of their produce is sold through their popular shopfronts on Russell and Thomas Roads, managed by Vince's wife Vy and well known for their delicious ripe strawberries. A small portion of their fruit is also sold to premium retailers in Perth.

*In this profile, we hear from Vince in his own words:*

## **We have a strong focus on quality**

Strawberries are such a delicious fruit, and we can grow them almost all year round. Our aim is to produce consistent high-quality strawberries with a little acid and good sugars (but not too much sugar). We pick our fruit when it's fully ripe, harvesting our Albion strawberries twice per week in the peak season. We also grow Festival which has excellent flavour up until October (but you must get the fertiliser right) and we are trialling Scarlet Rose this season.

Cold chain and transport logistics are very important to maintain fruit quality; you need to cool the fruit quickly after harvest and keep it cool until it reaches the consumer, and it also needs to be distributed quickly.

Our retail customers visit our shop three times per week to stock up on fresh strawberries, and we also supply a premium fresh produce home delivery business and premium retailers. We would like to expand and supply high-quality fruit daily into smaller shops, even into export if that's possible.

A major issue facing Perth strawberry growers with a quality focus is market returns – there is no appreciation (price incentive) for quality, so growers focus on quantity over quality. The market needs to pivot quickly to give better prices for quality if people start growing it, otherwise growers will just go back to producing large quantities of poor-quality fruit. It's a vicious cycle. Also, customers need time to accept the new quality and price point. Our customers are happy to pay extra for the high quality fruit we produce, and our prices remain stable year-round, not dropping to the lows seen in the broader market during times of oversupply.

**“ If it's good people are willing to pay for it.**

And people don't seem to tire of strawberries like they do with other sweeter fruits like grapes. We have customers that purchase three kilograms of fruit for their family three times per week consistently throughout our season, often eating a kilogram at a time. People love our fruit!



**Vince showing off the tasty Albion strawberries he grows in his substrate system.** Photo credit: Helen Newman

## **We are reducing risk and driving expansion with technology**

Farming is too hard when you rely on the climate and groundwater quality, especially when we can use technology to get around these problems!

We want to throw away the old way of doing things (the plastic waste, soil fumigation, old ways of watering and fertilising etc.) and move to a growing system that utilises the latest technology.

We currently grow 35,000 Albion strawberries in a triple substrate system at our Russell Road property. The fruit quality is excellent, and we can have good control over nutrient and water applications, there are also labour savings. The environment is better off too; we use more than 60% less water and there are less nutrients leaching into the ground.

We plan to double our strawberry plant numbers in the coming year (up to 320,000) and hope to convert all our strawberry growing operations to substrate over the next three years (finances permitting).

Water quality in our 130 foot (40m) bore at our Russell Road farm has been declining, going from an electrical conductivity (EC) of 1 in 2003 to 2.4 today, which is not suitable for substrate production. Water quality at our Thomas Road site has also been in decline with the EC increasing from 0.7 to 0.9 over the last four years; Chloride and bicarbonate have also been an issue at this site. To get around this problem, I made my own Reverse Osmosis (RO) system. An off-the-shelf model was going to cost \$48,000 which I couldn't afford so I made my own under the guidance of a specialist on the field for \$28,000.



**Premium quality strawberries from the farm packed for retail sale.** Photo credit: Vince Ngo

While we still have plants in the ground, we are also working on better ways to manage water and nutrients there as well. We recently installed a series of soil moisture probes to help us improve irrigation management across the different soil types on our properties. I have also created a custom irrigation and fertigation system that has environmental inputs (including radiation) so that I can optimise my water use and protect groundwater quality.

Harvest records have been another focus. I have made a wireless automatic weighing system that records workers pick rates.

*[You may have guessed – Vince has an electronics background and a passion for automation!]*

### **We have even more future technology plans**

To provide the most consistent crop you need the right technology. My ultimate aim is to have a factory-like production system where I can produce a consistent crop every day of the year.

There is so much new technology being developed and applied to strawberry growing overseas; we have an exciting future to work towards. Using Artificial Intelligence (AI) to look at the crop instead of looking by eye is my next challenge – this sensory data will give feedback to the controller to make irrigation, nutrition, and pest management decisions.

Labour management is another key issue.

Piece rates are often used in our industry to drive efficiency (a faster pick rate) but that doesn't work well when you are harvesting ripe fruit which is more susceptible to bruising, it needs gentle handling. That's why we have dreams of moving towards factory-like production that uses oscillating tables that move up and down during harvest. This type of system also allows much higher density planting – you can fit four to six times more plants on the same area of land which is helpful when land close to markets is so expensive.

Once our business is financially stable, we plan to invest heavily into research so that we can continually improve all aspects of our business – postharvest handling, cold chain management, communication with our customers, traceability. We want to use the latest technology to bring our growing costs down so that great tasting fruit is accessible to all.

