

# Impact Update

Welcome to **Impact Update** – a snapshot of your Hort Innovation investments in action and how they are creating lasting change.

A key priority for Hort Innovation is to deliver valuable data and insights that transform decision-making. This edition takes a deep dive into some of Hort Innovation's data-focused investments and how they are making a difference on the ground.



8

EDITION 8  
MARCH 2024

## Mapping Australia's tree crop industries

### In this edition...

Mapping Australia's tree crop industries

New research reveals a bunch of things have changed since parents were at school

Get a leg up with Level Up Hort

New key drivers in growth emerge as the long-term outlook remains strong

Meet the people behind the projects that elevate horticulture

Using data to deliver effective marketing campaigns

How did consumers behave in 2023?

Growing Australian almonds' global presence

The Australian Tree Crop Map was first imagined in 2014 when a number of tree crop industries approached the Applied Agricultural Remote Sensing Centre (AARSC) to see whether remote sensing technology could be used to estimate the size of their respective production areas.

Through Hort Innovation, the 'Multi-scale monitoring tools for managing Australian tree crops' project was established with support from the Australian Government Department of Agriculture, Fisheries and Forestry as part of its Rural R&D for Profit program.

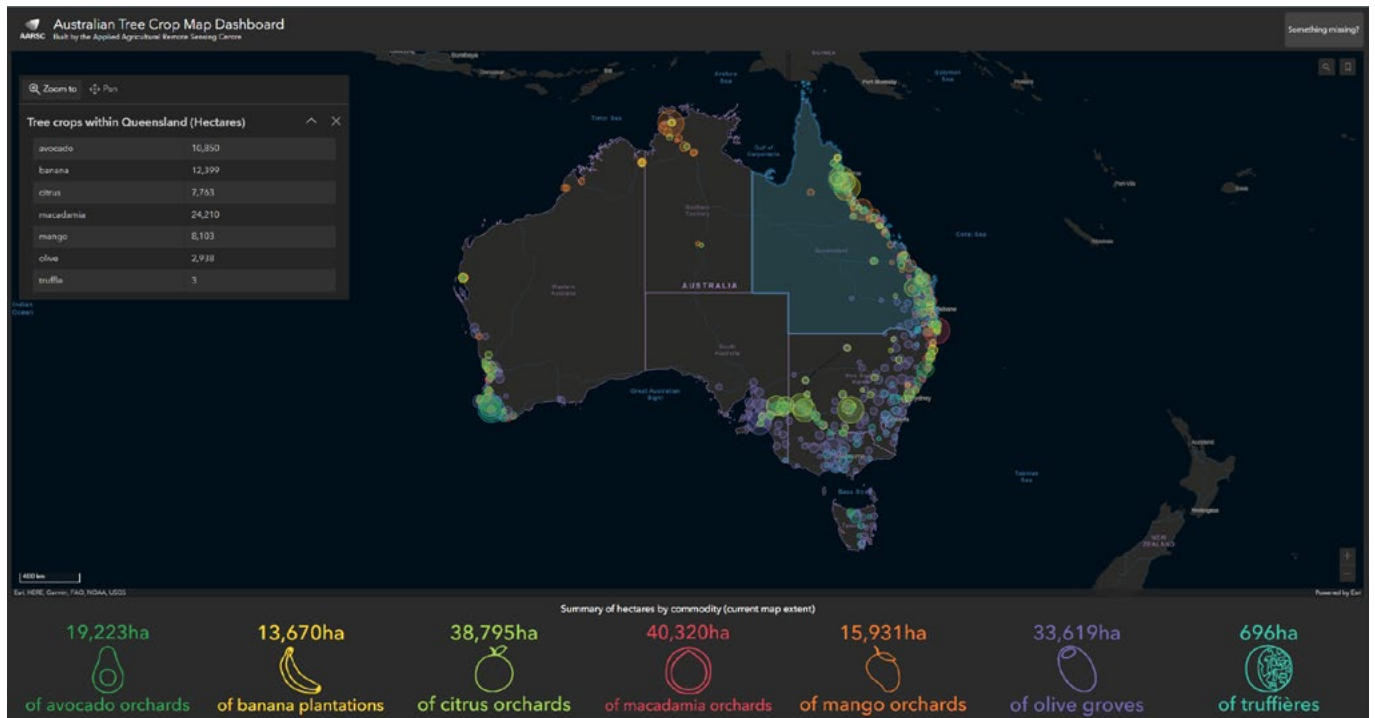
The project was led by the University of England, including four industries, researchers and commercial entities who joined forces to address a number of common issues. These included the national mapping of all commercial orchards to better understand industry size and annual change, as well as

identifying emerging technologies that offered improved measures of tree health and yield forecasting.

In 2017, the AARSC mapping team led by Craig Shephard, delivered the first Australian Tree Crop Map (ATCM).

"Industry were seeking scientific evidence on the current size and location of their orchards to understand actual area of production. Until then, estimates were based on other "non-spatial" data and there was uncertainty regarding how big these industries were and more importantly where the orchards were," Craig said.

Continues >>



“No one had mapped tree crops at commodity level at national scale. The challenge in building an accurate map is classifying them from one another – they all look alike from a satellite!”

By incorporating existing industry data, citizen science, government land use information, remote sensing analytics and extensive ground truthing, the ATCM set a new global standard for land use mapping of agriculture at individual commodity level. Not only did the map provide a more accurate measure of the size and distribution of Australia’s avocado, macadamia and mango industries, it was also applied as a valuable tool for biosecurity preparedness and responding to natural disasters.

Craig said the key to success in building these maps was the level of engagement from industry.

“We established a ‘citizen-science’ approach where anyone could review and contribute to the map, which has proven very effective at gathering additional data, particularly for discerning which crop is which. We also encourage growers to let us know if they are planting a new orchard so that we can update the map. It’s essential for mapping new plantings which cannot be accurately mapped with satellite imagery alone.”

The successful development and adoption of the ATCM stimulated significant interest from other industries and initiated a second phase of the project in 2019 that saw the inclusion of banana plantations, citrus orchards and olive groves in the map. The updated ATCM (published in 2022) included more detail with a minimum mapping unit of 1 hectare.

As a measure of success, the ATCM dashboard has been adopted by each industry as their main collation point

of orchard locations (hosted on each respective industry body websites); it was awarded the best international dashboard at the 2022 International Esri conference in San Diego (70,000 delegates); the ATCM is now the main data source for the Australian Bureau of Statistics and ABARES census; the map layer has also been used by the Murray Darling Basin Commission and Harvest Trail.

In addition, there have been many practical applications of the map,



Continues >>

including industry biosecurity preparedness and incursions such as Varroa Mite and Panama Tropical Race 4.

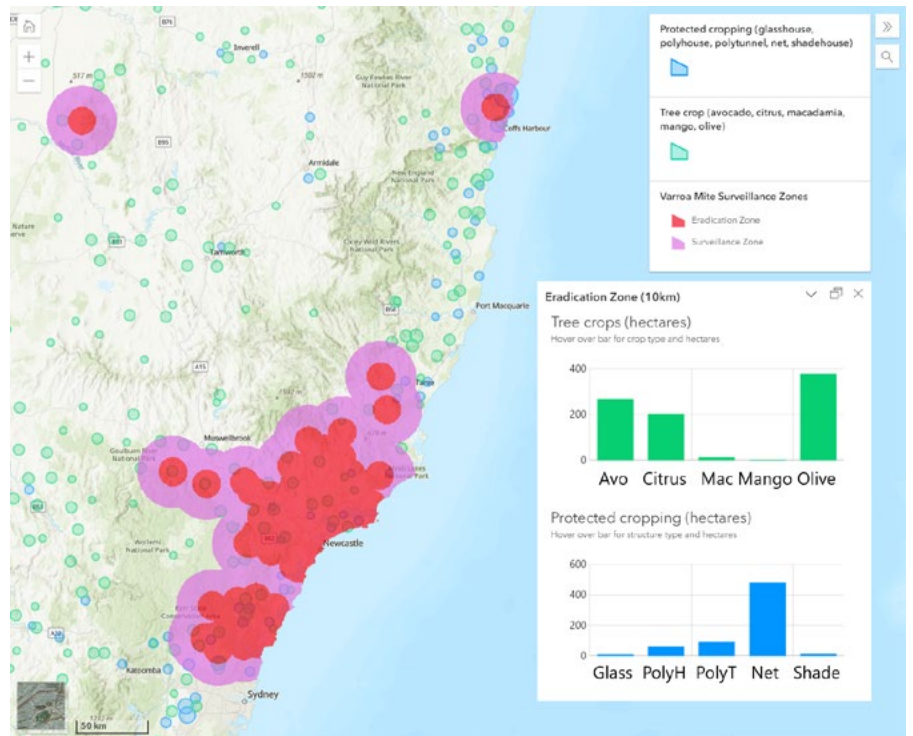
Craig said a highlight was how the map addressed a water security issue in relation to Paradise Dam.

“When a Queensland government proposal to lower the Paradise Dam wall on the Burnett River came to light, the map was instrumental in informing industry’s response and subsequent legal actions by showing the current area of production within the Bundaberg irrigation supply area, that would have been affected by lowering the dam wall.”

An ongoing highlight for Craig has been how the map has been used to estimate the impact of severe weather events.

“As we speak, another tropical cyclone is forming in the Coral Sea, so AARSC are currently capturing that data which will be analysed and published into our Severe Weather App in near-real time. Potential impact areas to tree crops are summarised within the wind zones, which will inform the response by industry for impacted growers.”

Craig and the AARSC mapping team are looking forward to what the next five years of further developing the map will bring.

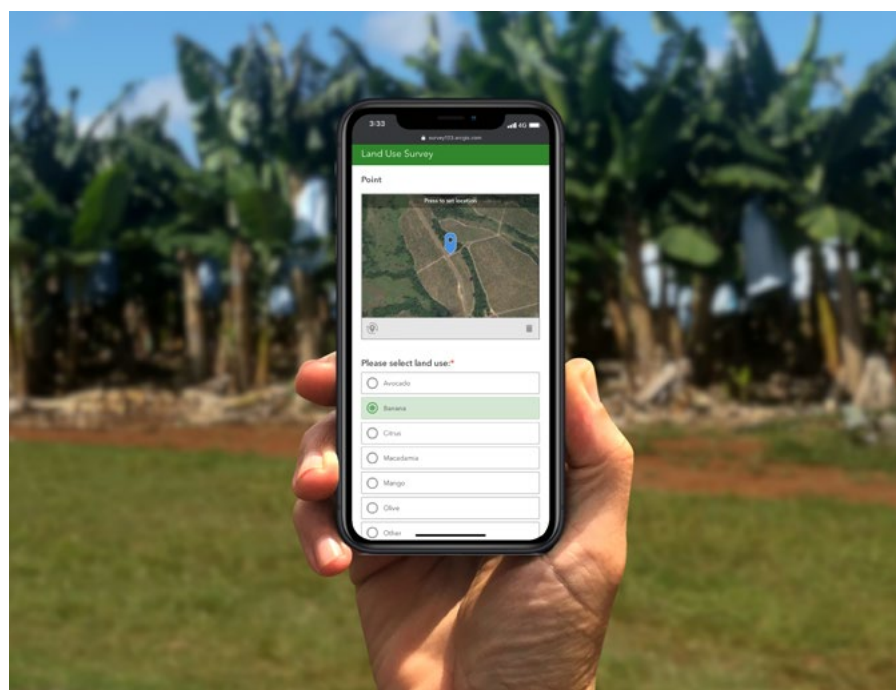


“In this next phase, we will be making a significant expansion to the data and insights available about avocado, banana, citrus and macadamia crops in Australia. This involves adding data like planting year, variety, and land management.

“The end goal is two mapping products—one that is secured for access by industry only that contains commercial information, and the

second as the Australian Tree Crop Map, which remains a publicly-available dataset that shows just the location and extent of tree crops.”

Readers are encouraged to view the ATCM and a range of additional theme-based mapping applications which support it at [www.une.edu.au/webapps](http://www.une.edu.au/webapps).



“We established a ‘citizen-science’ approach where anyone could review and contribute to the map, which has proven very effective at gathering additional data, particularly for discerning which crop is which.”

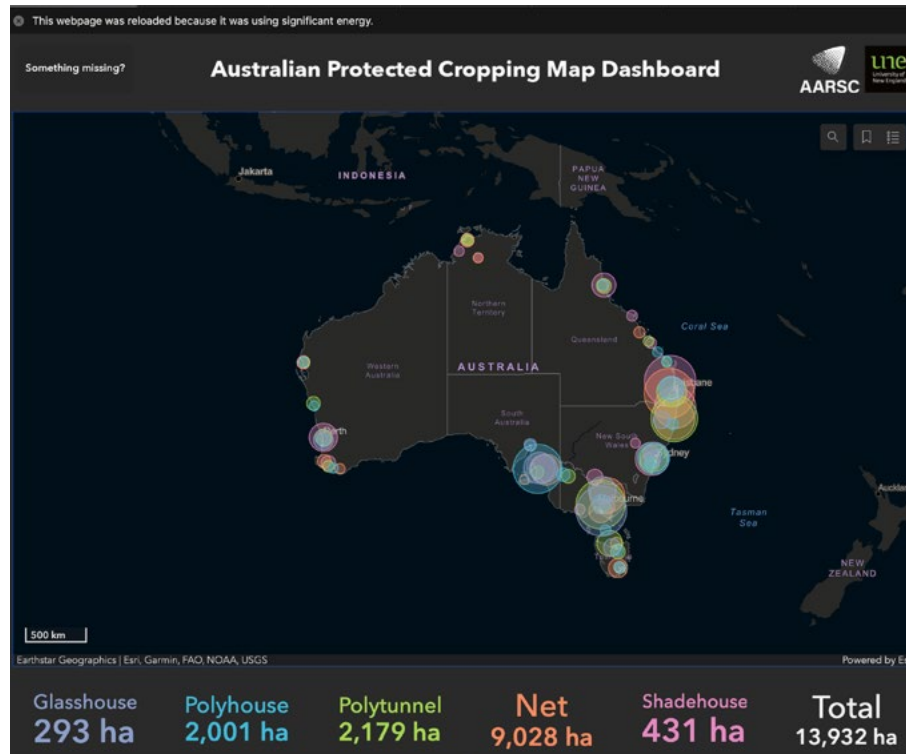
**Craig Shephard, AARSC mapping team**

Continues >>

## Yield forecasting

A key outcome of both phases of the project has been the development of remote-sensing (satellite and airborne) methodologies for the improved measurement of tree health as well as for the yield forecasting for avocado, mango, macadamia and citrus orchards. More accurate pre-harvest yield forecasting of tree crops offers significant benefits at various scales. At the national and regional scale, higher prediction accuracies help industry bodies make more informed decisions about forward-selling to both domestic and overseas markets. At the farm level, growers can better plan harvesting logistics, including labour, machinery, packaging, transport and storage requirements, and their capacity to meet market demands. All these aspects can improve profitability for growers and industry stakeholders.

The methodologies have been adopted widely in Australia and across seven other countries.



## Mapping the protected cropping industry

In 2022, the AARSC again responded to demand by Protected Cropping Australia (PCA) and Greater Sydney Local Land Services (LLS) to deliver Australia's first national baseline map of all commercial protected cropping systems. This led to the successful funding of the project by Hort Innovation and Future Food Systems CRC (FFSCRC).

The resultant map, presented in the Australian Protected Cropping Map Dashboard identified 13,932 hectares of protected cropping systems in Australia, including 4,473 hectares of greenhouses (glasshouses, playhouses and polytunnels) and 9,459 hectares of nets (shade

houses and permanent nets). The dashboard interactively summarises the total production area by structure type, and also returns summary metrics by State, Territory, and Local Government Area (LGA).

The spatial data in the map served multiple purposes including a current benchmark of industry size for the broader sector. The map also offered essential foundational data crucial for market development, planning infrastructure, managing labour and transportation logistics, ensuring traceability, strengthening biosecurity measures and response to natural disasters.

*This program was funded by Hort Innovation with support from the Australian Government Department of Agriculture, Fisheries and Forestry as part of its Rural R&D for Profit program with the citrus industry research and development levy, UNE Central Queensland University, AMIA, NT DITT, NSW DPI, Department of Agriculture and Fisheries Queensland (DAFQ) and Tie Up Farming.*

# New research reveals a bunch of things have changed since parents were at school

New research by Australian Bananas has found that Aussie parents feel the biggest changes in education across the decades is not just the integration of technology (76 per cent) or skyrocketing back-to-school costs (57 per cent), but the new age lunchbox (49 per cent) due to the increased food guidelines and 'must have' lunch box styles.



## The insights

The research, funded by banana growers through the marketing levy, reveals school lunches are among the biggest differences parents have noticed from their own schooling experience. With four in five (81 per cent) sharing they now need to adhere to food guidelines and almost half of Aussie parents say there are a lot more restrictions on school lunches, compared to when they were at school (67 per cent).

Nuts (82 per cent) and seafood (33 per cent) were the biggest no-nos with the increase in allergy awareness,

however, treats with sugar (29 per cent) and even plastic wrap (23 per cent) were included on the list.

While most (70 per cent) Aussie parents find it increasingly difficult to stick to the evolving school lunch box guidance, nearly all parents (93 per cent) shared that they include a banana. Naturally convenient in their own peel 'packaging', it is easy to understand why.

The classic sandwiches, including peanut butter or ham, observed the highest decline in popularity, paving the way for new favourites, sushi and salad.

Also in decline are the trusty plastic lunch boxes, with paper lunch bags virtually non-existent, making bento boxes (38 per cent) and cooler bags (24 per cent) the new 'it' items.

With the modern changes to school lunches, it is surprising that parents (94 per cent) are not stressing about what to put in the lunchbox. Instead, their biggest challenge is getting products that their child will like (48 per cent) and being able to afford it all due to the cost of living (46 per cent). The majority (90 per cent) of parents even admitted to feeling an increasing financial strain this year.

Continues >>



### The approach

One thing that has not changed is the humble Australian banana, which continues to be the key snack in lunch boxes across the country, helping kids do their thing at school, past, present and future.

To showcase the integral part the feel good fruit has played in Australian lunchbox history, Australian Bananas has partnered with media personality Tim Robards and his daughter Elle. Tim said: "Although a lot has changed since I was at school compared to Elle, one thing is the same – our favourite school snack, Australian Bananas."

According to Dianne Sciacca, an Australian banana grower, "bananas have been the go-to school snack for generations. Australian bananas aren't just delicious, they are an extremely nutritious, long-lasting energy snack packed with natural carbohydrates, vitamin B6 and potassium. Australian bananas are the perfect snack for fuelling any hop, skip or jump."

### The campaign

The primary objective of the Australian Banana's 'Back to School' campaign is to create a spike in media attention on bananas during the 'back to school' period that highlights bananas as nature's energy snack providing the fuel to help you do your thing.

The campaign kicked off in mid-January to educate Australians on how even though many schooling habits have evolved, the humble banana has always been Australia's favourite snack to fuel for school.

#### Key elements of the campaign included:

##### Talent

To bring the campaign to life, Australian Bananas partnered with reality star (*The Bachelor*, *SAS Australia*) and health and fitness professional, Tim Robards, and his daughter, Elle Robards. Together the pair starred in a hero video shared with media and across social media. The video demonstrates what has

changed since Tim attended school versus Elle attending school, while highlighting how bananas were, and remain, their favourite school snack, and sharing key banana campaign messages. Still images of the pair were also captured and shared with media for use across the campaign.

In addition to this, Tim promoted the campaign through:

- Conducting media interviews to highlight bananas as the ultimate back to school snack
- Providing a quote for Australian Bananas' press release to be shared with media
- Sharing the campaign content on his own social (Instagram) account.

##### Social media and influencer partner

To further promote the back-to-school campaign, social media activity launched in January. This included sharing of content captured with talent partners Tim and Elle across

*Continues >>*



"Bananas have been the go-to school snack for generations. Australian Bananas aren't just delicious, they are an extremely nutritious, long-lasting energy snack packed with natural carbohydrates, vitamin B6 and potassium. Australian bananas are the perfect snack for fuelling any hop, skip or jump.

**Dianne Sciacca**  
**Australian Banana Grower**

the Australian Bananas' owned social media channels (Facebook, Instagram, Tiktok).

The campaign also featured other parents, including media personality and dad of two, Ben Milbourne, to share the key campaign messages and extend the reach of the campaign with their audiences, as well as sharing this influencer content across the Australian Bananas' social media channels (Facebook, Instagram, TikTok).

## Retail

Australian Bananas has an 'always on' approach with Coles and Woolworths online where bananas are promoted throughout the year. Activities included:

- Relevant creative and taglines for the "aisles" on which the campaign appears on online such as snacking, breakfast and fruit and veg
- Back to School focus on the "Brainiac Banana"



In March, Australian Bananas will be trialling some new activations with Coles and Woolworths, with the aim to be more "omnichannel", targeting shoppers pre-store, in-store and online throughout their entire shopping journey.

- Feature on the Back to School Hub on Coles Online
- Product association in Coles with a complementary supplier partner
- E-newsletter to Woolworths Rewards customers reminding and encouraging impulse add to basket
- Out of home front of store advertising in Woolworths Metro stores, encouraging impulse purchase for lunchtime snacking

## Media coverage

To date the public relations campaign has secured 128 pieces of national coverage, including *The Today Show*, *Daily Mail Australia*, *9Honey* and *Australian Food Guide*. A key highlight includes an article titled 'Bananas: All the reasons to love this portable snack' which featured across the News Corp network. The public relations campaign coverage has created more than 750,000 opportunities to see the banana key messages.

# Get a leg up with Level Up Hort

Interested in growing your farm profits? Delivered through Hort Innovation and led by Planfarm, and in partnership with RMCG, **Level Up Hort** is a new program focused on supporting vegetable and onion businesses to increase profitability and build long-term resilience.

The free service provides participating growers with specialised horticulture business consulting to the **value of \$10,000 per year**. The program runs for five years, equating to \$50,000 in value.



## Three focus areas

**Link:** Independent and highly qualified farm business advisers are linked with growers for detailed data collection, an in-depth analysis and a high-level review of your whole farming business to establish which factors affect production efficiencies, what drives profit in your business and how you may best grow your assets over time.

**Learn:** Use the data analysis to gain greater insights into your business. Through face-to-face consultation, the review process will provide you with the knowledge to make data-driven management decisions that over time will make your business more efficient, more profitable and better able to cope with challenging seasons and market unpredictability.

**Leverage:** Knowing your costs and how best to distribute resources within your business to generate profit allows you to control and influence the factors that turn small returns into greater returns and grow your business wealth over time.

Continues >>





**Paul Omodei, Horticulture Lead at Planfarm**, has been involved in the program since the pilot phase began in Western Australia in 2017. He is now leading this new national approach, with growers at the heart of the program.

Paul said what drives him every day is seeing clients make a positive change to their business.

"Our priority is to deliver a high-value advisory service to the growers involved that makes a tangible impact on their business. The growers come first, and the benchmarking data comes second.

"Success looks different for different businesses. For one client, it may be profit gains; for another, it might be having a succession plan in place or being able to spend time away from their business. Whatever success looks like for them, we can help them look at the health of their business and help them work towards that goal.

"We help our clients think through where they want to be five years, in ten years, and how they will get there."

Paul sees Level Up Hort's offering as giving clients a 3D view of their businesses.

"Growers are really good at their jobs, which is growing high-quality fresh produce. We are here to help them look at the health of their business as a whole.

"We help them to see which parts of their business are under pressure and what levers we could pull to change that.

"Being a third party, we can say things like 'Hang on, what about this? Can we change how we do this?' which is harder when you are in the weeds of running the business yourself."

**Stephanie Carstairs is the program manager at Level Up Hort** and plays a role promoting the program's benefits to growers.

"If I am talking to a grower about this program, I tell them that it delivers a farm advisory service that can directly benefit their business by improving their performance over time and that we will work closely with them to look at their profitability," Steff said.

"However, if I am talking to someone who works in an industry support role (such as an industry representative body, agronomist or rural banker), in that case, the program has different benefits, such as benchmarking and seeing how the industry performs.

The benefits for them are about higher-level industry trends so that they know what is happening across the board in vegetables, what production costs are, what the standout areas to watch, what the issues are if freight is different in different regions and things like that.

"It is vital for growers and industry to know that this is a unique program in that it is not just a benchmarking program; it is a program that gives growers something back; it gives them a high-value service in exchange for their benchmark data."

Steff encourages interested growers to contact the Level Up Hort team to see what the program can do for them.

"After making initial contact, the first step is to visit the grower at their farm. This first visit involves gathering detailed information about the business and signing some agreements. An important aspect of this first meeting is establishing trust and assuring the grower that confidentiality is a core pillar of our business that we take very seriously.

"After this visit, we might need to follow up with the grower for more information. Then, within four to six weeks, we return to the farm to give them a detailed review of their business. This review looks at how well their farm is doing financially, including their

*Continues >>*

production, cash flow, and overall financial health. We also discuss any issues they might have, like high costs in certain areas, cash flow problems, or efficiency issues, and suggest ways to improve.”

Steff said this part of the process could be a lot to take in initially, but it is a goldmine of helpful information for the participant.

“The review helps managers see their business from a different perspective, almost like a 3D image, going beyond basic financial figures.

“Having that extra set of eyes on your business is valuable, giving growers a chance to pause and look at their businesses. Growers do not often have the time to stop and look back and reflect on their businesses and ask if they are on track. Are they in a good place? Where do they want to be in the next five to ten years?”

The national Level Up Hort program officially began in mid-2023, with the initial focus being getting the word out about the program and what benefits it can bring to growers and industry.

“Our current focus is on promoting this distinctive benchmarking program to industry,” said Steff.



“This program goes beyond merely collecting benchmark data; we provide a high-value service to growers. Depending on the business’s complexity, the data-gathering process typically takes half a day. It’s a minimal time investment for a service that can significantly impact their operations.”

**Stephanie Carstairs, Level Up Hort program manager**



## Building a resilient vegetable industry

AUSVEG chief executive officer Michael Coote said Level Up Hort would enhance the resilience of the vegetable industry by providing clear and effective measures of success.

“This program is going to help the vegetable industry focus on how they conduct their business,” Michael said.

“Growers currently do not have access to holistic data which gives them meaningful insights into how they are performing in comparison with others. This initiative will give growers a mechanism to evaluate their business’s performance compared to others based on their specific crop type and location.

“The data will also provide insights to the industry as a whole, so that we can identify areas to invest more heavily in to enhance our competitiveness and unlock a more prosperous future.

“Growers will have the tools to identify areas for improvement and enhance their competitiveness in the industry, unlocking the potential for a more prosperous future.”

# New key drivers in growth emerge as the long-term outlook remains strong

Collecting, analysing and sharing data allows the horticulture sector to understand industry dynamics and trends, and also empowers stakeholders to make well-informed decisions and engage in proactive strategic planning.

Delivered by Hort Innovation each year in collaboration with Freshlogic, the **2022/2023 Australian Horticulture Statistics Handbook** is a flagship resource for the industry, offering the most comprehensive and current data spanning more than 75 horticultural products, including fruits, nuts, vegetables, nursery, turf and cut flowers.

The Handbook functions in three main ways:

- Reconciles fragmented and incomplete data and information.
- Collectively represents the sector through statistics.
- Monitors industry trends.

Drawing insights from diverse supply chain sources, including international trade statistics, levy-funded research projects and peak industry bodies, the Handbook provides a detailed overview of how the sector has performed, encompassing production volumes and values, exports and imports, processing, wholesale, and retail and food service.

Despite challenging growing conditions and varied sector performances, the industry witnessed an upswing in production to reach \$16.2 billion in value in 2022/2023. The total production value increased by three per cent over the 12 months and over the past decade, the compound annual average growth rate has sat in the



vicinity of an impressive six per cent in value terms.

The 2022/2023 data unveiled notable shifts in the key drivers of industry growth across four horticulture categories: fruit, vegetables, nuts, and amenities. Fruit experienced a significant surge of 13 per cent, driven by substantial increases in production value for avocados and table grapes, rising by 54 per cent and 27 per cent, respectively, each contributing an additional \$200 million in farmgate value. Conversely, nuts witnessed a significant decline in production value, falling by 42 per cent, attributed to high production costs and supply surpassing demand.

Overall vegetable production values reached an all-time high of \$5.83 billion,

increasing 5.4 per cent in 2021/22. While value increased, vegetable production volume dropped again in 2022/23 by 3.2 per cent, making 2022/23 the lowest year for production volume in six years.

Despite a marginal drop in export value in 2022/23, the export market remains a pivotal growth driver for the horticulture sector and has a robust outlook. Fruits played a crucial role in supporting the export market, witnessing a six per cent increase over the 2022/2023 period, reaching a value of \$1.3 billion.

While the data reflects a range of outcomes for Australian horticulture growers and the overall sector, which are currently grappling with various short-term challenges, the industry's long-term prospects stand resilient. Over the past decade, the sector has experienced a sustained period of robust growth, and this positive trajectory appears set to continue in the future despite the challenges industry is currently facing.

Coupled with substantial investments in research and development and effective marketing strategies, the industry is well positioned for an exciting phase of growth and innovation. With more than \$620 million dollars currently invested over 400 active projects, Hort Innovation is committed to a prosperous and sustainable Australian horticulture industry built on innovation.



## Meet the people behind the projects that elevate horticulture

Just as it takes a village to raise a child, it takes a large team effort to bring to life new Hort Innovation investments in research and development, trade and marketing.

Before any new project is created and activated, a concerted and collaborative undertaking occurs behind the scenes, involving numerous subject matter experts at Hort Innovation.

These are the people responsible for providing expertise in areas such as industry data and analysis, consumer insights and fund management.

Three of the Hort Innovation team members who have regular input into informing and shaping new investments are Lucy Noble, David Conyers and Wendy Hubbard.

**Industry insights manager Lucy Noble** is a member of the Industry Insights Team whose role is to identify patterns,

trends and correlations that can guide and inform targeted R&D investments.

“We do this through a portfolio of projects that provide benchmarking, forecasting, industry data services and reports to horticulture growers and industries,” Lucy said.

“Through all of these programs, the horticulture industry and growers are supported to make more informed decisions, as well as contributing valuable insights into the industry’s current performance, future trends and national level production data.

“On top of this, the Industry Insights Team is also responsible for monitoring and evaluating the effectiveness and impact of current investments.”

Lucy and her team underpin industry knowledge through tasks such as:

- Overseeing R&D projects to ensure growers and industries have access to current, relevant and reliable data to support data-driven decisions.
- Working on initiatives to ensure levy-payers are equipped with data-driven insights to make informed decisions and strategically steer the industry.
- Cultivating relationships with partners (service delivery partners, industry partners, government partners) to enhance access to industry and national level data and insights.

Continues >>

Lucy oversees projects with 11 industries. Some of these projects are multi-industry and across-sector, such as generation of the popular Hort Stats Handbook. The Community Trust in Rural Industries investment in which she is involved is across multiple agricultural industries, not just horticulture.

When asked what a typical working day looks like for her, Lucy said every day was different but often involved a combination of: speaking to service delivery partners who lead Hort Innovation-funded projects; collaborating with industry around their needs and developing investment ideas; looking at industry and project data; working with other members of the Hort Innovation team on various initiatives; and exploring ways of increasing the reach of insights by talking to those outside the industry.

Lucy has enthusiastically embraced her role at Hort Innovation and her place in horticulture: "It's an industry full of opportunity and people who are going to make it happen. That's something to be excited about.

"We're supporting Australian horticulture growers and industries to sustainably produce the world's best fresh fruit, vegetables, nuts and greenlife."

The primary focus of **David Conyers in his role as investment manager** is the execution of each industry's Strategic Investment Plan (SIP).

David and his two investment manager colleagues provide cohesive support between multiple internal and external stakeholders to ensure sufficient funds are available for approved R&D and marketing levy-funded projects.

"The core functions of our team include: maintenance of reliable, accurate forecasts; delivery of financial updates to industry; ensuring governance is followed for investments and due diligence; and reporting for the business (Board, Investment Committee etc)," David said.

"The portfolio of industries that I manage are the tropicals, nursery, turf, potatoes (fresh and processed), pyrethrum and sweetpotatoes.

In total, this equates to 15 Industries and 27 Individual funds (both R&D and Marketing)."

David said his typical working day, while quite varied, often involved tasks such as investment/project approvals in line with industry panel advice, and reconciliation of industry forecasts against commitments and project expenditure.

"Other tasks include providing financial updates to industry and daily communication with Hort Innovation's industry service delivery managers regarding their industry portfolios."

David said working for Hort Innovation had given him a "new lease of life".

"Having been a career banker for 33 years where everything was based on profit, to now working for Hort Innovation where the importance is based on outcomes for growers to reach their industry goals, is truly rewarding."

The work of **consumer insights manager Wendy Hubbard** and her colleagues not only contributes to building bespoke marketing strategies, but it helps to enhance understanding of end users by growers and their industries.

"Consumer insights empowers growers by equipping them with knowledge about the end user of the produce they grow," said Wendy, who works across all horticulture industries.

"Knowing what the consumer likes and wants is important to growers; that knowledge is fundamental if you want to have a successful business."

Consumer tracking data is closely scrutinised by Wendy who will call for further investigation of data if something unusual or of particular interest is identified.

"For instance, we want to know what influences 'light' buying or even lapsed buyers among consumers so we can articulate the cause and build strategies in response."

In 2023, Wendy and her team facilitated a well-attended insights webinar on sustainability which

informed growers and those involved in the horticulture supply chain about consumer attitudes, behaviours and motivations around sustainability.

"As part of this exercise, we identified that most consumers would expect a discount of around 20 per cent for 'imperfects'. I was in my local supermarket recently and spotted a sign promoting the Odd Bunch produce and calling out savings of at least 20 per cent – co-incidence or was it our research that informed this?"

A typical working day for Wendy could involve preparing analysis for a strategy workshop, collating facts to support a media release, preparing facts for Senate Estimates briefs, managing delivery partner outputs, responding to requests for information and planning upcoming webinars.

When asked what excites her about working in horticulture, Wendy answers that it is knowing she is contributing to advancing an entire sector and making a difference to the lives of generations of Australians.

"Being able to provide food for people is a wonderful thing, especially when you know that food is healthy, so I am grateful to be working in an industry that plays such a pivotal role in nutritious food supply," Wendy said.

"Helping growers, suppliers, marketers and sellers of fruit and vegetables drive demand for good quality food is incredibly rewarding.

"I also love to meet growers and see the amazing technological developments that are shaping the future of this innovative and forward-thinking sector."



# Using data to deliver effective marketing campaigns

How do you know that a marketing campaign will resonate with consumers?

Hort Innovation's **Head of Consumer Marketing, Felecia White**, gives us insight into how Hort Innovation leverages data to ensure campaigns deliver maximum return on investment for growers and the horticulture industry.

Hort Innovation's Marketing & Demand Creation function delivers **innovative and impactful marketing campaigns for 24 horticulture industries** to drive domestic and international demand for Australian fresh produce.

## Why does data matter to marketing campaigns?

Using data means we can make consumer-driven choices about how and where to invest marketing levies that are based on fact rather than opinion, giving us greater confidence that the campaign will deliver value for the industry.

Over the past year, the Hort Innovation Marketing & Demand Creation function has gone through a process to move from once-off evaluation tools to a standardised process that uses best-practice data sources and testing methodologies. Access to this data ensures we have objective insights to drive or validate our thinking.

## Why test our campaigns?

Before campaigns are fully produced and go live in the market, we test that they resonate with consumers to ensure we are on the right track. Without this, we risk proceeding with campaigns that may not be as effective, which wastes time and resources.

## How does the testing work?

Since 2022, Hort Innovation has partnered with Cubery to evaluate more than 75 pieces of advertising content across various media and produce. Hort Innovation's strong average performance results from a combination of factors – all contributing to the current Cubery Rating average lying around 10 points higher than the norm.

Cubery has a database of thousands of communication pieces for various content types (e.g. video, out-of-home, digital) used to evaluate new campaigns. In addition, they have a quick turnaround and are cost-effective.

Cubery involves an online survey of 150 consumers who are 'non-rejecters' of the commodity. Respondents are exposed to a stimulus that represents the ideas and execution of the campaign and answer a list of standardised questions. Cubery compares these results to a normative database and a Hort Innovation average.

The Cubery testing seeks to answer three key questions:

1. **Captivate:** Does the campaign stand out and grab attention?
2. **Connect:** Does the campaign result in instant recall of the brand?
3. **Compel:** Does the campaign motivate behavioural change?

Based on the results, the campaign will either go ahead to market or be adjusted considering the feedback to ensure that it becomes an impactful campaign.

**Recently Hort Innovation used Cubery insights** to identify which options to go with for the apple industry's latest 'Hit Refresh' campaign. Four options were taken through the Cubery testing process so that the strongest two were identified and progressed. **This means we are only investing in the best performing creative campaigns.**



# How did consumers behave in 2023?

Through the **Harvest to Home** platform, Hort Innovation invests in regular consumer behaviour data and insight reporting for a range of horticulture industries ([www.harvesttohome.net.au](http://www.harvesttohome.net.au)). The information assists growers and supply chain partners in decision-making for their businesses.

The Harvest to Home team from NielsenIQ has produced a 2023 wrap-up of consumer behaviour together with a deep dive into how consumers behaved over the festive season.

The total grocery category recorded growth across both value and volume (six per cent and 1.4 per cent, respectively) while cost of living continues to rise with average prices up by 4.5 per cent.

With Australian households unable to escape the cost-of-living crisis, shoppers continue to make more frequent yet smaller shops in search of better deals. Amid the effect of inflation, discounters performed ahead of other retail channels versus the prior year as

Australian households searched for lower-priced options.

## VEGETABLES: A LOOK AT THEIR PERFORMANCE IN 2023

2023 was a positive year for total vegetable consumption overall, where total vegetables recorded a decline in average prices in the year 2023 by 7.8 per cent compared to the previous year (fall from \$5.68 to \$5.23), translating to increased volume sales by 3.1 per cent. Dollar sales for total vegetables, however, declined owing to a drop in prices in 2023 versus prior year

An increase in volume sales for total vegetables was fuelled by a rise in purchasing frequency (increasing by 3.5 per cent) as well as a drop in average prices compared with the previous year.

Within the vegetable categories, sweetcorn, beans, broccoli, capsicum and eggplant registered the most volume growth in 2023 compared with 2022. Among these top five performing vegetables, only sweetcorn displayed growth across both dollar and volume sales in double-digits. In contrast, beans, broccoli, capsicum and eggplant had a reduction in dollar sales in 2023 versus 2022.



Continues >>

## **VEGETABLES:** PERFORMANCE DURING FESTIVE SEASON

Leading up to the festive season, average prices for vegetables were higher in December, compared with November, by 1.2 per cent, resulting in increased dollar and volume sales. However, compared with last year's festive season, dollar and volume sales have dropped by 2.2 per cent and -0.4 per cent, respectively.

Similarly, household reach for fresh vegetables was lower during the festive period compared with December 2022 (95 per cent for the four weeks to December 31, 2023, versus 96 per cent a year ago).

In terms of retailer performance, compared with the previous month, major supermarkets performed ahead of other retailers, growing by five per cent and 3.3 per cent in terms of dollar and volume sales. The increase in dollar sales stemmed from increased prices and more households purchasing more quantity per trip compared with November 2023.

During the festive season of 2023, eggplant performed ahead of all vegetables in volume sales compared with December 2022 while also registering growth in dollar sales. Following eggplant, celery, broccoli, herbs and cucumbers were among the top five performing vegetables in volume consumption during the festive period. Regarding dollar sales performance, only celery and broccoli registered a decline compared with the prior year.

## **FRUITS: A LOOK AT THEIR PERFORMANCE IN 2023**

Fresh fruits are no exception to inflation and skyrocketing grocery prices, registering a double-digit rise in average price per kg of 11 per cent compared with the previous year. Increased prices have propelled an increase in dollar sales by 9.9 per cent in 2023, while at the same time, volume consumption slowed, declining by one per cent compared to the previous year.

Fewer buying households (down by 0.4pts to 98.6 in the 52 weeks to December 31, 2023) along with smaller basket (KG) per trip drove down volume sales, while purchasing frequency recorded an uplift by 4.3 per cent, to an average of 61 trips per household in the year 2023.

Regarding retailer performance for total fruits, all channels recorded declining volume while growing for dollar sales. Major supermarkets registered the most value growth for total fruits, growing by 11.8 per cent compared with the previous year, increasing share in volume and sales.

Stone fruits, specifically cherries, nectarines, peaches and apricots, were among the top five performing fruits in terms of dollar sales in 2023, with cherries growing the most. Berries registered the third strongest value growth while displaying the strongest growth in terms of volume consumption.

## **FRUITS: PERFORMANCE DURING FESTIVE SEASON**

The overall fruit category performed ahead in the festive season compared to 2023 regarding volume consumption. A growth rate of 1.3 per cent was displayed for total fruits in the festive season of 2023 compared with the same time in the prior year (+3.6 per cent versus November 2023). Compared with the preceding year, dollar sales growth was less pronounced in the 2023 full-year performance, as average prices remained stagnant. However, value sales increased by 9.4 per cent compared with the previous month.

In comparison with the festive season in 2022, an uplift in purchasing frequency contributed to sales growth, while increased household reach and bigger basket size (KG) per trip were the catalysts for growth when compared to the prior month (November 2023).

For dollar sales, greengrocers and markets performed ahead of supermarkets in the four weeks to December 31, 2023, versus the same time a year ago. In terms of volume sales for the same period comparison, other supermarkets (excluding Woolies, Coles and Aldi) registered the most growth at 5.3 per cent.

Stonefruit (particularly plums, cherries, apricots and peaches) were among the top five performing fruits in terms of volume consumption in the four weeks to December 2023 versus the prior year. Increased household reach was the key contributing factor to growth. Melons had the second-highest growth in volume sales, fuelled by increased penetration and purchasing trips.





# Growing Australian almonds' global presence

The Australian almond industry is on a remarkable growth trajectory, with an ambitious target of exporting 50,000 tonnes within three years, aiming to surpass a total export value of A\$1 billion.

Delivered through Hort Innovation and led by the Almond Board of Australia, the Almond Market Access Trade and Development Program utilises data on global almond production and exports and insights into almond production in California and Australia. This data guides a global strategy that involves consumer research, customised approaches for established and emerging markets, and initiatives to boost demand.

The program is designed to support and drive this export-focused agenda, with key components including facilitating market access, participating in trade shows and missions, promoting health benefits through educational outreach, and fostering collaborative relationships with key trade stakeholders.

A crucial element of the program involves expanding into the Southeast Asia region, a currently underutilised market. This strategic move into Southeast Asia is grounded in several key data points:

- Market opportunity:** Southeast Asian markets present untapped opportunities for Australian almonds, capitalising on a gap left by Californian almonds.
- Emerging markets with low consumption:** These markets are categorised as emerging characterised by relatively low almond consumption. This allows Australian producers to introduce their products to new consumer bases.
- Increasing disposable income:** The region's growing disposable income aligns with consumer preferences for premium and healthier food options, including almonds.



▶ **Rising health consciousness:** The increasing health consciousness among Southeast Asian consumers generates a demand for nutritious and health-enhancing food products, positioning almonds as an attractive choice.

Expanding into Southeast Asia involves a significant initiative known as the 'Café Almonds' project, which capitalises on the prevalent cafe culture in the region. The aim is to promote almonds not only as a snack but also as a versatile food ingredient. The approach seeks to transition almonds from the hospitality sector to everyday home consumption, targeting hospitality, then food manufacturers, followed by retailers, and ultimately reaching households.

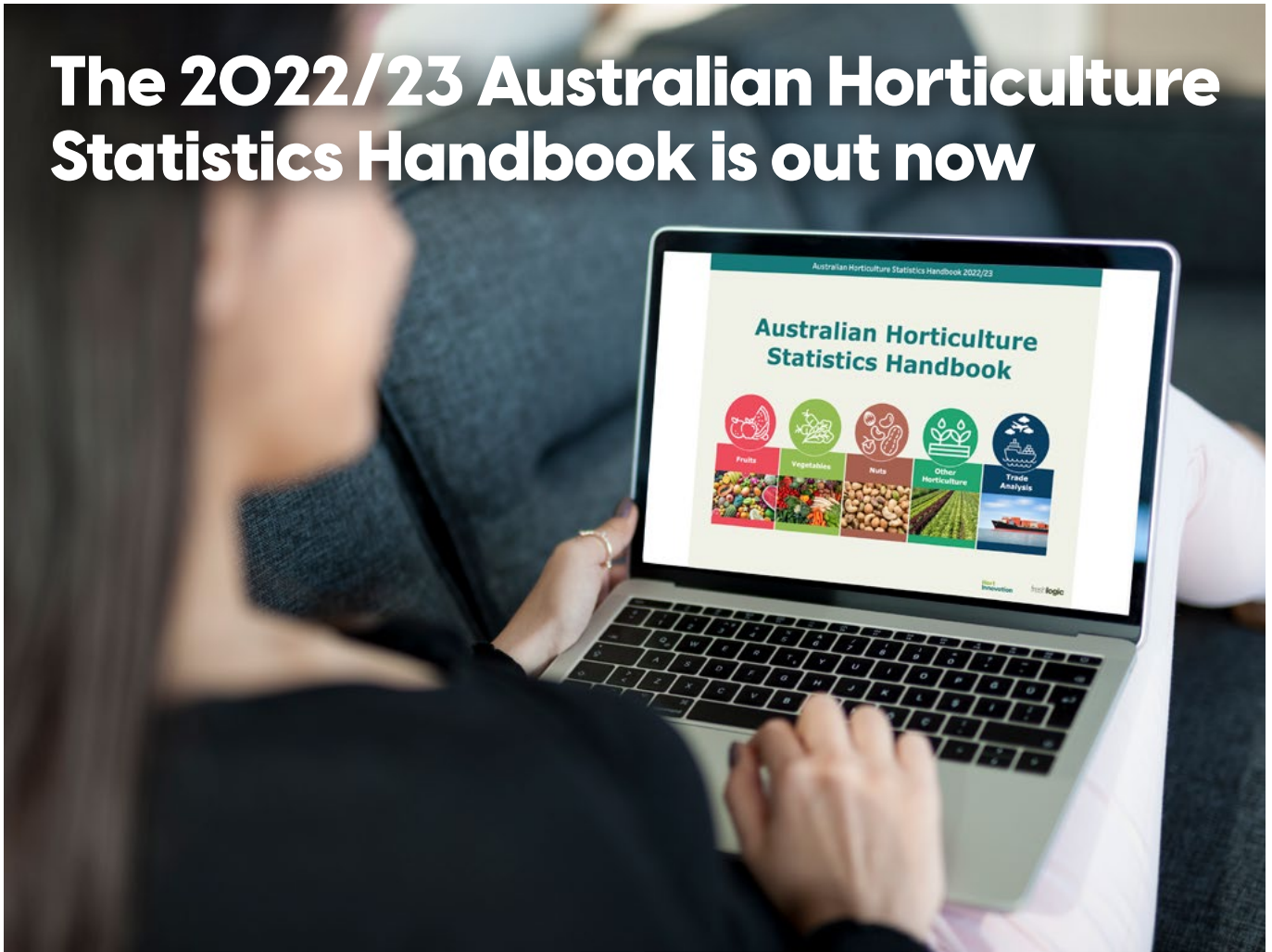
As part of the levy-funded Educating Food Professionals program, a series of almond-inspired recipes has been developed. The objective is to position almonds as the primary protein component in savory dishes, providing an opportunity to educate health professionals and encourage

the incorporation of almonds into local cuisines.

The project employs a data-driven approach, utilising global almond production and export statistics, including data from the International Nut and Dried Fruit Council (INC) and specific information on Californian and Australian almond production. This data serves as the foundation for a comprehensive global market development strategy, which includes consumer research and analysis for shaping the overall approach and scale of investment.

Hort Innovation's commitment to the global development of the Australian almond industry is evident through the almond market access trade and development program. The pursuit of new opportunities in regions such as Southeast Asia stands as a testament to the dedication to advancing the Australian almond industry. This strategic approach not only emphasises the quality and versatility of the produce but also positions the industry to thrive on an international scale.

# The 2022/23 Australian Horticulture Statistics Handbook is out now



## Disclaimer

Horticulture Innovation Australia Limited (Hort Innovation) makes no representations and expressly disclaims all warranties (to the extent permitted by law) about the accuracy, completeness, or currency of any information published or made available by Hort Innovation in relation to the Impact Update.

Your access, use and reliance on any information published or made available by Hort Innovation is entirely at your own risk. The information published or made available by Hort Innovation does not take into account your personal circumstances and you should make your own independent enquiries before making any decision concerning your interests or those of another party or otherwise relying on the information.

Hort Innovation is not responsible for, and will not be liable for, any loss (including indirect or consequential loss), damage, claim, expense, cost (including legal costs) or other liability arising in any way, including from any Hort Innovation or other person's negligence or otherwise from your use or non-use of the Impact Update, or from reliance on information contained in the material or that Hort Innovation makes available to you by any other means.

## Copyright notice

Copyright © Horticulture Innovation Australia Limited 2024.

Copyright subsists in the Impact Update ("**publication**").

Horticulture Innovation Australia Limited (Hort Innovation) owns the copyright in the publication, other than as permitted under the Copyright Act 1968 (Cth).

Copying in whole or in part of this publication is prohibited without the prior written consent of Hort Innovation.

Any request or enquiry to use this publication should be addressed to:

Communications Manager  
Hort Innovation  
Level 7, 141 Walker Street  
North Sydney NSW 2060  
Australia

Email: [communications@horticulture.com.au](mailto:communications@horticulture.com.au)

Phone: 02 8295 2300