AUTUMN 25 | VOL 59

mango matters

SPATIALLY ENABLING THE AUSTRALIAN MANGO INDUSTRY

page 18

MAKING MANGOES UNMISSABLE IN RETAIL SUPPLY CHAIN

page 26

HIGHLIGHTS FROM THE MANGO EXPORT WORKSHOP

PLUS Behind the Scenes at Steritech

from page 10

AUSTRALIAN® MANGOES

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09

Meet an AMIA Member
Brad Bowen

15

Your Levies: 5 Things to Know

18

Spatially Enabling the Australian Mango Industry

Cover: Terry Xanthos, Perfection Fresh & Daniel Niceforo, Niceforo Farms

CONTENTS

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"As an industry, we need to address a range of ongoing issues that are impacting growers daily."

- BEN MARTIN

CHAIRMAN'S REPORT

Ben Martin
Chairman, AMIA

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The 2024/25 season has come to a close, and the 2025/26 season is just around the corner. It has been a challenging season, with a compressed Darwin season and significant regional overlap. Many growers have faced disappointing returns.

As an industry, we need to address a range of ongoing issues that are impacting growers daily. While we work with the Horticulture Council (NFF Hort Council) and horticultural industries that make up the council on issues that impact growers such as compliance, workforce, biosecurity, there are other issues that our industry needs to address.

I see three key areas of activity that require a collective effort:

1. Increasing our efforts in marketing.
2. Increasing our efforts to develop exports, which will relieve some of the pressure on our domestic markets.
3. Supporting research that boosts production efficiency and supports all growers.

In March, the AMIA Board met for a two-day workshop to discuss the range of topics confronting our industry. Key topics included rising costs, growers' rights regarding property access by Border Force or other agencies, and responsibilities concerning contractors employing illegal workers.

The Board agreed to seek legal advice as to the rights of different government agencies (e.g. Border Force, Labour Hire Licensing Compliance Units) to enter your property. We also are clarifying grower's responsibility regarding workers legal status whilst working on their property, even those employed by contractors. We will keep members informed about the outcomes.

We regularly receive feedback from growers on our crop forecasting system, particularly regarding the potential impact on the market. The crop forecasting we undertake is important for all sectors as it provides guidance on both the timing and anticipated volumes from each region. In the coming months, we will be presenting a revised version of the crop forecast, featuring a new format designed to improve communication with members and the industry. We are excited with the changes and are hopeful it will lead to a better outcome for growers and the industry.

The Board also received a presentation from NTDAF on the current status of research into Mango Twig Tip Dieback. This continues to be a serious issue for growers in all regions but especially Darwin growers. We need research to develop management options and tools and ensure that growers are supported in managing this issue.

We also discussed the need to strengthen AMIA so we have the resources to meet industry demands. There is so much that needs to be done with so little resources available to industry. Over the next few months, the team will be focusing on ways to improve the way we engage with growers and the industry, identifying new revenue streams, and ensuring the financial stability of AMIA to continue our vital work.

CEO'S REPORT

Trevor Dunmall
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"I continue to feel fortunate to be working with mango growers and all the people who make up our industry."

- TREVOR DUNMALL

At recent grower meetings, the continuing challenges of increased production costs without a matching increase in returns have continued to be the message resonating across not only the mango industry, but across horticulture. The increasing pressure on growers through diminishing returns and tough seasonal conditions has continued through this season. As we all know, every season is different and in the ideal season where there is little production overlap between regions, the markets within Australia can manage volumes of fruit in the market. But, these ideal seasons will become increasingly rare, and the need to find more markets for our mangoes continues.

In March, we held a mango export workshop, in collaboration with QDPI and Hort Innovation. The participants in the workshop highlighted both the challenges and opportunities in export. Certainly, there are a lot of challenges from issues with access to freight, reliance on air freight, tough phytosanitary protocols, MRLs and inherent risks in supplying markets with limited knowledge of market conditions. As a result of the workshop, a Mango Export Development Committee was formed. The committee will provide advice to AMIA on a range of issues relevant to improving our export performance.

For many years we have worked on accessing new markets (market access is usually long-term processes), and this will continue to be a focus, but I believe our focus should shift to supporting growers and exporters building exports in the markets we already have access to. There are many activities which have a focus on exports which can also benefit growers who are focussed on the domestic market.

Recently, I spent several days in Canberra discussing issues related to sustainability, labour, biosecurity and export with Department staff and fellow horticulture industries, with many of the meetings organised by Richard Shannon from the Horticulture Council (NFF Hort Council). The focus of the government on the need to reduce emissions by 2030, and to reach net zero by 2050 appears unwavering. On top of this, the requirement for larger companies to provide annual emissions audit reports (similar to financial accounting audits) has already been legislated. While this requirement for auditable reporting of emissions will impact very large horticultural businesses (e.g. businesses with a revenue over $50 million) the potential flow on effects to growers is concerning.

While there is much discussion on emissions and whether the need for auditable accounting systems will be required for all growers, being aware and prepared is important. Equally, if not more important is that whenever you have an opportunity, highlight that horticultural tree crop production, including mangoes, are very low emitters. The graph on page 14 highlights that horticultural tree crop production is a very low cause of emissions compared with other agricultural industries.

Within the next month the Horticulture Council will be seeking information from you on the impact on growers of multiple auditable systems (e.g., Freshcare, HARPS). Yes, another survey, apologies in advance, but this will be a brief survey with the aim of quantifying the impact of the systems and audits. While there is work happening in the background, on the ground the outcomes of this work are not very visible, at this stage. It is important that all involved, (industry, standard owners, audit companies) continue to work to address the challenges and find systems, so that we maintain our vigilance on food safety and the ethical treatment of workers, with improved efficiency and the inherent stress that the current processes cause.

We also met with CSIRO and arranged a visit for several of their researchers to visit packing sheds late in the season to look at the application of both NIR technology and X-ray technology for the detection of fruit pests, such as seed weevil and fruit fly. While the application of this technology is still in the early stages of research, in the long term, the outcomes could make substantial differences to how we access markets (domestic and export).

In February, I met Charles Burke, the Food Farmer's Commissioner of Queensland to gain a greater understanding of his role and to discuss issues mango growers are facing. Charles and his team have been working on a website which will allow you to highlight issues you are having in the market. Read more on page 17.

As widely reported, the USA government has imposed wide ranging tariffs on imports. While it's very early days, the tariff on many Australian produce is expected to be 10% but may be subject to further negotiation. Australia has had access to the US market for mangoes since 2015 and our growers/exporters have undertaken a lot of work to build relationships in key market segments. The USA does have a small mango industry, but imports mangoes from many other countries. The impact of these tariffs will become evident over the forthcoming season.

Thank you to NT Farmers for the invitation to speak at the post season workshop held in Darwin in late February. While many growers have gone through a tough season, there continues to be a positive outlook for the future, despite the range of challenges.

It has been 12 months since I had the opportunity to come back and work with AMIA. I continue to feel fortunate to be working with mango growers and all the people who make up our industry. We produce and market premium mangoes, and our focus on delivering quality, premium products to markets in Australia and throughout the world brings both opportunities and many challenges. The Board and our team continue to work on strengthening our industry with a focus on a sustainable future for our Australian mango growers.

AROUND THE REGIONS

Southern Western Australia

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It's been a patchy season in Gingin, with lighter volumes of fruit hitting the market this year, even though growing conditions were fairly good this season. Fruit set was reasonably good, but some early fruit drop seems to have occurred. Weather conditions were mostly mild during the harvest window, providing ideal conditions for picking. In the lead up to harvest, the occasional heatwave has contributed to sunburn damage on the fruit, although this is usually expected every year.

In Carnarvon, the crop was overall on the lighter side this season, especially for the KP's, although there seem to have been more fruit than what growers initially thought. The crop seemed to have matured quite quickly after Christmas, with growers having to pick over a reduced harvest window.

The AMIA board had a face-to-face strategic meeting in Brisbane in March to review the direction and priorities of the organisation and ensure levy funds continue to be spent in a way that benefits all growers. The meeting was organised alongside the Export Workshop which gathered growers and industry stakeholders to discuss the challenges of the Australian mango export sector. An outcome of the workshop was the formation of an export working group to continue to support the development of mango export, with the aim of relieving pressure on the domestic market and maintaining better prices throughout the season.

Southern Queensland & New South Wales

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This year's mango season kicked off with high hopes, growers were anticipating strong yields and good-quality fruit. However, as the season progressed, challenges arose, including lower-than-expected prices, reduced yields, and quality issues—particularly in regions impacted by persistent wet weather.

One of the biggest challenges was the low starting price of mangoes, which failed to recover throughout the season despite increased production costs. This left many farms struggling to cover expenses. Smaller family-run farms, in particular, faced additional pressure from the rising cost of compliance requirements. We are hopeful that the work the National Farmers' Federation (NFF) Compliance Taskforce is undertaking can help to reduce these costs for growers.

Growers also faced concerns around losing access to key pesticides without suitable alternatives, raising fears of resistance issues as the remaining options are chemically similar. As the season winds down, most farms are focused on maintenance, including post-season fertilisation, leveraging recent rains and warm weather for healthy leaf growth. However, these conditions have also led to increased insect pressure.

Amid the difficulties, some positive developments emerged. A recent export workshop highlighted opportunities to expand international market access, offering a potential outlet during high-yield seasons and helping manage domestic market oversupply.

Looking ahead, tackling these challenges while capitalising on new opportunities will be crucial for the mango industry's resilience and profitability. Continued collaboration and innovation will support growers in adapting to evolving market conditions.

Northern Territory & Northern Western Australia

Mitchael Curtis
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I hope this report finds you well. As we review the current season in the Katherine region, there are both positive developments and significant challenges that we, as growers, must address collectively.

On a positive note, the recent rainfall has resulted in the trees looking good in our region and a promising outlook for the coming crop. However, we are also facing rising operational costs that threaten our sustainability. Labour shortages and costs continue to be a pressing issue, compounded by difficulties in sourcing trucks and the escalating costs associated with these logistical challenges. Additionally, we are now confronted with increased regulatory requirements, including possible upcoming carbon audits related to global warming initiatives.

It is imperative that we take a proactive approach to communicate our situation to our local Members of Parliament and engage our community through platforms such as Facebook. Our workers can share their experiences, highlighting how the recent changes, including the introduction of time-and-a-half pay, have affected them and our operations. While the government may believe that raising wages is beneficial, it has inadvertently created a more challenging environment for both employees and farmers, particularly for those relying on backpackers.

The more we remain silent, the more burden will be placed on us. I urge every grower to take a stand and advocate for our interests. We cannot continue to absorb rising costs while policymakers in Canberra devise new schemes that further strain our resources. It is essential that we voice our concerns, especially during this election phase when politicians are more receptive to our needs.

As a board member, I and others have consistently raised these issues at our meetings, and I encourage all of you to get our own story out there. We must unite in our efforts to communicate effectively with those who can influence change. Together, we can ensure that our voices are heard and that our challenges are addressed.

Geoff Warnock
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The past season saw lighter volumes, but overall the fruit quality was good. The wet season has been quite unusual, with consistent rain and moderate downpour, allowing water to soak deep into the ground rather than running off. As a result, trees are flushing well and showing signs of good health heading into the next season.

In March, the Mango Export Workshop, led by Australian Mangoes in Brisbane, brought together growers and a broad range of industry stakeholders together. It was a valuable opportunity for networking, knowledge-sharing, and collaboration, with meaningful discussions and outcomes.

Unfortunately, Queensland growers are once again facing destructive weather, bringing more challenges and hardship in these regions. As always, we look at supporting growers and the industry as we look ahead to the next season.

Leo Skliros
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As we prepare for the 2025 season, I look back over the past 10 years and compare the challenges we once faced with those of recent years. How did we get to this disastrous position? Our every move is now questioned and audited — followed by a bill. Government departments are arriving during our busiest times (some armed), halting harvest operations to interview staff. These delays disrupt our harvest window and cannot be recovered, resulting in lost fruit.

In a mere five to six years, we've gone from a highly profitable, sought-after industry to one facing the threat of bankruptcy. Today, we are burdened by rising production costs, increasing compliance demands, and growing government oversight — a far cry from the days when our biggest concerns were tree health, weather, and pests and diseases.

Unfortunately, I fear things will only get worse for mango growers and other agriculture industries if we don't band together and do something to refocus on profitability.

Far North Queensland & North Queensland

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With the harvest season now complete, many growers in the region have begun post-harvest activities such as pruning, spraying and on-farm maintenance in preparation for the new season's flowering. As I write this, the region is experiencing significant volumes of rain that, hopefully, will not negatively impact flowering.

An increase in Mango Shoot Looper on young flush has been observed, and the cost and time to mitigate this pest is significant, adding to the overall cost of production. Additional, growers are voicing concerns about compliance challenges and the continual increase in the cost of production. One factor contributing to this increase is the recent change to the Horticulture Award, which, from 1st April has changed from C13 to C14, resulting in a $0.80 per hour increase for casual employee wages.

Furthermore, a wage increase expected on July 1 will likely continue to impact the cost of production and impact mango growers nationwide. I cannot help but remain concerned around the viability and longevity of the mango industry, especially for young growers who have to manage these issues. The succession plan rate is decreasing in the region with more farms hitting the market.

Growers appreciated the post-season catch-up with AMIA's CEO, Trevor Dunmall, where they had the opportunity to discuss issues and achievements from the past season.

On a brighter note, mango growers are looking forward to the upcoming flowering season and we hope for more favourable climatic conditions that support flowering and fruit set, enabling the region to produce more quality Australian mangoes for both domestic and international markets.

John Nardi
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Reflecting on the 2024/25 season, growers in the region faced significant weather challenges. The overlapping of the regions was a significant impact for many growers, resulting in high volumes of fruit in the market at times and depressed pricing. Rain also affected fruit quality and caused harvest and transport delays, particularly in the Mareeba region and some southern regions. Overall, fruit volumes appeared to be down by approximately 30% for most growers in the region.

Fortunately, the season ended well and on a positive note with better pricing and good demand for late varieties. Most growers in the Mareeba region are now well into their maintenance programs, focusing on nutrition and pruning, while also catching up after the heavy rain. However, weather conditions remain unstable in the Queensland regions, with more rain expected.

We remain hopeful that the weather will be kind moving forward and that we will see a more typical flowering and fruit set this year.

MEET AN AMIA MEMBER

SANDY COVE | MOUNTAIN VIEW
BRAD BOWEN

Q&A by Adelaide Belyea, Industry Development Officer QLD/NSW

This Autumn, we're heading up to North Queensland to check in with Brad Bowen, one of our AMIA members and a long-time mango grower. Brad talks about life in the orchard, the challenges growers are facing, and how being part of AMIA helps him stay connected. He also shares a few highlights from his journey so far, and what he's looking forward to in the future of mango growing.

Let's dive into our Q&A with Brad!

Q. Can you share how AMIA has provided support, resources or networking opportunities specific to mango growers like you?

We are well supported by AMIA through phone calls and visits from Adelaide, where we share information. It's reassuring to know that our voice is heard and that we have the opportunity to discuss industry and regional issues. We always make an effort to attend pre-season roadshows to get an update on mango specific projects and welcome the opportunity for networking with other growers, sponsors and industry stakeholders.

Q. Tell us a bit about your business?

We've been growing mangoes for 15 years and we currently grow R2E2's, KP's, Yess, Ahha and Now varieties. All our mangoes are grown on sandy and rocky soils that produce fruit with desirable colour characteristics and flavour profiles. We are currently working on growing our export side of the business, as well as supplying fruit to our domestic customers and agents.

Q. What are some of the challenges that growers are facing in your region?

We continue to face high cost of production and low returns on large R2E2's. The overwhelming burden and stress with compliance requirements and extreme weather events are also significant challenges.

Q. What is the best piece of advice you've been given around being a mango grower?

Always aim for good quality, do a good job presenting your fruit and keep your finger on the pulse with daily market prices. If you can't see your footprints in the orchard, you're not spending enough time in it!

Q. What has been your most memorable or proudest moment in your mango growing career so far?

There are lots of good moments, like when you grow a bumper crop! It always makes us smile and we really enjoy it when our customers and agents reach out to compliment us on our fruit.

Q. What is the one thing that most excites you about the future of mango growing and why?

New and emerging varieties that improve the mango industry for growers and consumers.

"If you can't see your footprints in the orchard, you're not spending enough time in it!"

- BRAD BOWEN

Highlights from the Mango Export Workshop

Australian Mangoes

Australian Mangoes, in collaboration with the Queensland Department of Primary Industries and Hort Innovation, hosted a mango export workshop to bring together industry stakeholders and explore opportunities for expanding Australia's mango export sector, which is key to relieve pressure on the domestic market. The event provided a platform to discuss challenges, opportunities, share insights, and identify the support needed to facilitate sustainable growth in global markets.

The workshop kicked off with presentations from Australian Mangoes, Trade and Investment Queensland, and Austrade, covering past export performance, key market trends, and the evolving dynamics of international trade. These presentations set the stage for a broader discussion on overcoming obstacles in global markets.

Hort Innovation also outlined their role in helping the mango industry address market access challenges and develop targeted marketing strategies. Flora Zhang, General Manager – Export from Avocados Australia, shared an overview of the avocado industry's $1.7 million export development project, offering insights and strategies that could benefit the mango industry.

Alastair Scott, Robert Hall and Charlie Manolis.

Key challenges highlighted through engaging group discussions included cost, time, complex protocols and risk management due to the perishable nature of mangoes. Competitive domestic prices at certain times during the season were also identified as a deterrent, with the group acknowledging the importance to commit to export markets in a consistent way.

Limited airfreight availability and capacity, particularly from the Northern Territory, was also a significant concern. Additionally, the fact that Australian mangoes are consistently the most expensive in our export markets was identified as both a challenge and an opportunity.

While high prices can make it harder to compete against lower-cost suppliers, Australian mangoes are perceived as clean, green, and premium-quality. This presents a unique opportunity to position them as a luxury product and command higher prices in key markets.

Attendees at the Mango Export Workshop.

Mitchael Curtis and Llewellyn van den Hever.

Breakout session on challenges and opportunities.

Samantha Frolov, Daniel Niceforo, Michelle Res and Felecia White.

Panel discussion on export experiences. Alastair Scott, John Nardi, Daniel Niceforo and Marie Piccone.

On the opportunity front, participants discussed several ways to enhance export performance. These included improving market access through better export pathways such as further developing non-protocol markets, leveraging new chemistry solutions to address MRL (Maximum Residue Level) constraints, and researching controlled atmosphere technologies to extend shelf life, with a focus on sea freight.

The group emphasised the need for more up-to-date insights into consumer preferences and trends as well as real-time data on export market dynamics, including information on competitors' exports. This data would help exporters tailor their strategies and remain competitive.

The potential value of study tours and trade missions, both inbound and outbound, was discussed. These initiatives offer exporters valuable insights into target markets and importers a deeper understanding of Australian mango production and handling, ensuring quality is maintained throughout the supply chain.

The day concluded with a session on ongoing research initiatives, featuring experts from QDPI, CSIRO, and the Fresh and Secure Trade Alliance (FASTA), who shared insights into pest detection and supply chain management technologies that could further support the development of the Australian mango export sector.

Two key outcomes from the workshop were the formation of an export committee to guide industry export strategies and a group to assist CSIRO with research into x-ray technology for pest detection.

The insights gained from the workshop informed discussions and decisions at the Mango Industry Marketing Strategic Investment Advisory Panel (SIAP) meeting, shaping marketing plans for the upcoming season.

We would like to thank the Queensland Government's Food and Fibre to Market: Industry Partnerships program, managed by the Queensland Department of Primary Industries, for their support in making this workshop possible.

A special thanks to all the attendees, speakers, and partners who contributed to the success of this event. We look forward to continued collaboration and innovation in this space.

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Photograph by Paul Langlois USDA APHIS PPQ.

Behind the Scenes at Steritech

Australian Mangoes

Ahead of the Mango Export Workshop, a group of growers and team members from Australian Mangoes and Hort Innovation - toured Steritech's irradiation facility in Narangba, Brisbane. The tour provided an insightful look into the process of irradiation which is used as a phytosanitary method to manage pests of quarantine concern, ensuring that fruit meets the necessary phytosanitary standards for both domestic and export markets. The Brisbane facility handles domestic trade under ICA-55, enabling mangoes to be sent to South Australia, Tasmania and Western Australia and exports to key markets such as New Zealand and the USA.

The Brisbane facility is available to treat fruit five days per week with fruit temperatures maintained in large cool rooms prior to and following treatment. The facility has large cool rooms to help maintain the cool chain and preserve the integrity of the produce. The treatment process requires full pallets to be loaded onto a conveyor which then carries the fruit past a source on a controlled timer cycle that moderates the treatment. The journey along the conveyor takes between 30 and 60 minutes depending on the fruit and destination market. The treatment area is surrounded by thick concrete walls and chilled during produce treatments holding a temperature of approximately 15-20 degree Celsius. The room is ventilated to prevent build up on ozone which makes chilling to lower temperatures difficult.

This year marked a record season for mango irradiation, with over 4600 pallet spaces treated, amounting to just shy of 4000t, approximately double the largest previous year. The growth was driven by the increase in domestic ICA-55 trade.

We would like to extend a special thank you to Chris Garcia-Barrio and Lucas Redshaw from Steritech for facilitating the tour and sharing their knowledge with the group. This tour highlighted the vital role irradiation plays in the mango industry, ensuring that mangoes meet the necessary standards for both domestic and international markets while maintaining high-quality freshness. With record-breaking treatment volumes, Steritech's facilities in Brisbane and Melbourne are crucial in supporting Australia's mango industry.

More Information

steritech.com.au

Acknowledgment: *Support from the Queensland Government's Food and Fibre to Market: Industry Partnerships program, managed by the Queensland Department of Primary Industries.*

Queensland Government

STERITECH
Protecting what matters

KEY FIGURES FOR THE 2024/25 MANGO SEASON

TOTAL IRRADIATED MANGO TREATMENTS

4673 PALLET SPACES

MELBOURNE FACILITY TOTAL TREATMENTS

2192 PALLET SPACES

- 994 South Australia
- 877 Tasmania
- 321 Western Australia

BRISBANE FACILITY TOTAL TREATMENTS

2481 PALLET SPACES

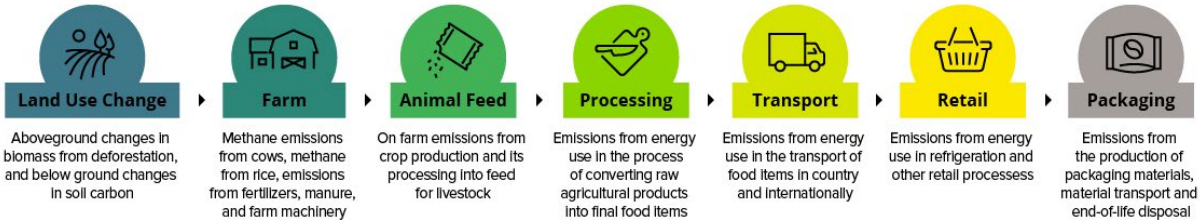
- 1883 exports to New Zealand (1600t approx.)
- 251 South Australia
- 237 Western Australia
- 110 USA (66t)

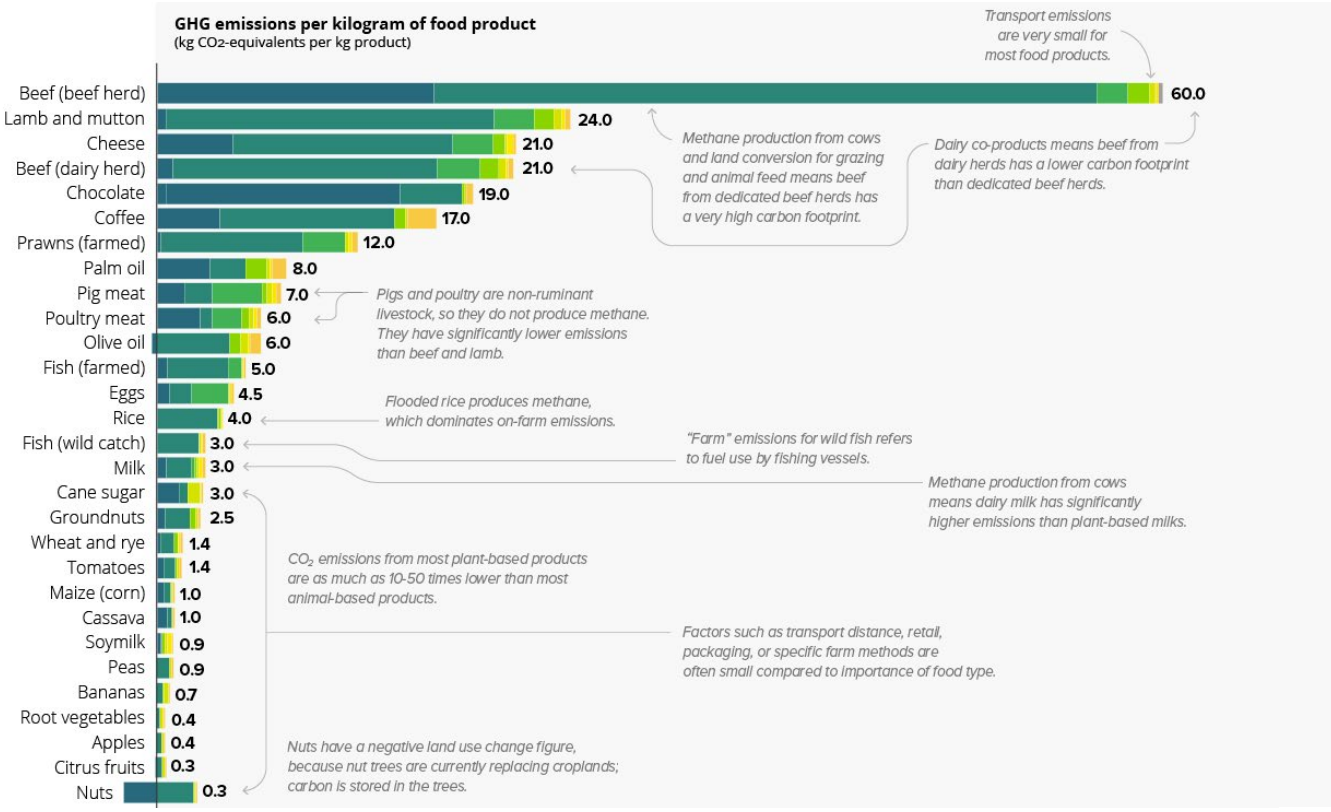
Note: Approx weight conversions USA pallet = 600kg and ICA-55 / NZ pallet = 850kg

Greenhouse Gas Emissions Across the Supply Chain

Source: OurWorldinData.org

Not all foods have the same environmental footprint, this chart shows how horticultural tree crops are among the lowest greenhouse gas emitters across the supply chain. There is a vast difference in greenhouse gases (GHG) that are produced across various food types.





Note: Greenhouse gas emissions are given as global average values based on data across 38,700 commercially viable farms in 119 countries. Data source: Poore and Nemecek (2018). Reducing food's environmental impacts through producers and consumers. Science. Images sourced from the Noun Project. OurWorldinData.org - Research and data to make progress against the world's largest problems.

South Australia Bans Plastic Fruit Labels

Source: www.replacethewaste.sa.gov.au

From 1 September 2025, South Australia will ban a range of plastic products including non-compostable plastic produce stickers.

The ban applies to plastic labels that are not certified compostable to the Australian Standard (AS) and are affixed to fresh produce, such as fruit and vegetables, for sale in South Australia.

As a transitional measure, there will be a three-year exemption (until 31 August 2028) for stickers certified compostable to ASTM D6400 (US Standard), EN 13432, TUV OK compost INDUSTRIAL, or TUV OK compost HOME.

If you're supplying mangoes to South Australia, we recommend contacting your label supplier as soon as possible to discuss compliant labelling options.

YOUR LEVIES 5 things to know

Sarah Strutt, Industry Service Manager, Hort Innnovation

As part of ongoing efforts to improve communication about the impact of your levies for your industry, we're introducing a Hort Innovation update into Mango Matters to share '5 things' that are currently relevant and may be of interest.

1. R&D

Approximately 75% ($500k) of R&D levy expenditure in FY24/25 is delivering the following projects:

- Mango industry communications program (MG21001). Delivery partner - AMIA
- Building the Australian mango industry's innovative and culture capability (MG21002). Delivery partner – AMIA
- Investigating the control of fruit drop in mango to support innovative solutions for Australian growers (MG21004). Delivery partner - University of Queensland. See article in Mango Matters, Spring 2024.
- Managing mangoes for future climates (MG22000). Delivery partner – Central Queensland University. See article on page 22.

The remaining 25% is invested in multi-fund projects – the most significant ones are listed in the R&D update from page 24.

More detail is available in the Mango Fund Annual Investment Plan 2024/25.

2. Marketing

This edition includes a report on the results of the 2024/25 season marketing campaign. Last month the Strategic Investment Advisory Panel (SIAP) met with the Hort Innovation marketing team to collaboratively develop a three-year marketing strategy for mangoes and plan activities for the 2025/26 season. More insight to the plans for next season will be shared in the next issue of Mango Matters.

3. Frontiers

The mango industry is fortunate to benefit from a number of current Hort Innovation Frontiers investments. These are co-investment projects, generally with no levy input.

The Spatially enabling tree crop production practice (AS23000) and Serviced supply chains II (AM21000) projects are a couple delivering data and research specifically for the mango industry. Other Frontiers projects relevant to your industry are summarised in the R&D update from page 24.

4. Investment advice

The Mango SIAP is the group of industry representatives who provide insight and advice to guide investment of levies. At the SIAP meeting in March following the marketing planning workshop, the panel:

- Endorsed the three-year marketing strategy and proposed activities for 2025/26 that will see an increase (from 2024/25) in the percentage of funds invested in 'sharing the joy of Aussie mangoes beyond our shores'.
- Provided advice on the R&D fund forecast to make available funds to invest in immediate priorities including export market development.
- Proposed the panel receive updates on projects MG21004 and MG22000 and others nearing completion, to inform review and planning of investments priorities for 2025/26 and beyond at their next meeting.

The panel and Hort Innovation would welcome input on current and future R&D and marketing investment contact from growers, or others involved in the industry. Please contact Sarah Strutt or one of the SIAP members share your thoughts.

5. Hort Innovation

Paying a levy does not automatically make you a member of Hort Innovation, yet being a member provides you with an array of benefits, so we encourage you to sign up for membership. More information about the benefits of this free membership – including voting rights, networking opportunities and news alerts - is available at Hort Innovation membership.

More information

Contact Sarah Strutt, Industry Service Manager.
E: sarah.strutt@horticulture.com.au M: 0427 147 964

Image L-R: Daniel Niceforo (guest), Martina Matzner, Kayla Castorina, Elyse Allum (Brand Manager), Felecia White (Head of Consumer Insights & Capability), Joe Moro, Sarah Strutt (Industry Service Manager), Samantha Frolov, Andrew Burns (Supply Chain Engagement Manager), Marie Piccone; Daniel Rye, Kristian Pucciarmati, Karina Keisler (GM Marketing & Communications), Trevor Dunmall, Belinda Van Schaik (Head of Marketing). Absent: Ben Martin, Matthew Palise.

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The Queensland Food Farmers' Commission

Source: www.offcq.qld.gov.au

The Queensland Food Farmers' Commission (QFFC) is a committed and experienced advocate for Queensland's food farmers.

The Commission is an independent authority established under the Queensland Food Farmers' Commissioner Act 2024, representing the State of Queensland as part of the Department of Primary Industries. It includes the Food Farmers' Commissioner and its supporting office.

This initiative follows the Queensland Parliament Supermarket Pricing Select Committee's recommendation to establish a Commissioner to:

- improve price transparency with dealings related to food supply chains and pricing of products
- address power imbalances in the food supply chain
- advocate for the state's food farmers to support sustainability and stability of the food supply chain in Queensland.

The Commission is dedicated to fostering fairness and transparency in the food supply chain, ensuring that Queensland farmers are supported and empowered to thrive in a competitive market. The QFFC's work will contribute to a sustainable agricultural sector and promote consumer confidence in Queensland's food industry.

The Commission is keen to hear about examples of:

- supermarket power imbalances
- compliance burdens
- limited market access
- ongoing workforce constraints.

Charles Burke
Interim Queensland Food Farmers' Commissioner

These issues are not new, but they remain top of mind for growers who feel the squeeze from all sides.

With this in mind, the Food Farmers' Commissioner (FFC) has been actively pushing forward a series of initiatives designed to tackle these challenges head-on. One major milestone is the launch of the QFFC website and anonymous reporting portal, providing a secure way for farmers to share their experiences. This tool will help capture evidence and examples of pricing manipulation, supply chain barriers, and compliance inconsistencies, all while maintaining strict anonymity. The insights gathered will directly inform policy discussions and industry advocacy.

If you're a farmer experiencing these or similar challenges, reach out directly to the QFFC on 0448 661 305 or Charles.Burke@offcq.qld.gov.au or securely share your experiences through the new anonymous portal.

Helpful Links

QFF Website

Anonymous Reporting Portal

Forecast Chemical Review Timeframes Extended

Source: APVMA

The Australian Pesticides and Veterinary Medicines Authority (APVMA) has revised the expected publication dates for the proposed regulatory decisions on fipronil, neonicotinoids, and anticoagulant rodenticides.

The expected publication of the proposed decisions on fipronil agricultural chemical products has been delayed until April 2026 and fipronil veterinary chemical products until March 2026.

Proposed decisions on the individual chemistries within the neonicotinoid review (acetamiprid, clothianidin, dinotefuran, imidacloprid, thiacloprid, and thiamethoxam) will be published separately, commencing in late 2025.

The expected publication date for the proposed decision on anticoagulant rodenticides has been delayed until July 2025.

APVMA continues to progress all ongoing chemical reconsiderations, including prioritising the finalisation of chemical reconsiderations subject to the Ministerial Direction given by the Minister for Agriculture, Fisheries and Forestry, Senator the Hon Murray Watt, in July 2023. The ongoing reconsiderations subject to the Ministerial Direction are paraquat, diquat, fenitrothion, neomycin and fipronil.

ANTICOAGULANT RODENTICIDES
July 2025

NEONICOTINOID REVIEW
Late 2025

FIPRONIL
Veterinary chemical products
March 2026

FIPRONIL
Agricultural chemical products
April 2026

Spatially Enabling the Australian Mango Industry

Craig Shephard, Senior Researcher and Andrew Robson, Director Professor, AARSC University of New England

The Australian mango industry is entering a new phase of innovation with the introduction of advanced spatial mapping initiatives. Building on past successes, the Australian Tree Crop Map (ATCM) will now include a new, industry-only map, providing detailed insights at the block level - collected in collaboration with the owner or manager. This update will provide the industry with better decision-making capabilities, from yield forecasting and strengthening biosecurity measures.

The Evolution of the Australian Tree Crop Map

The ATCM was originally developed in 2017 as part of the Multi-scale Monitoring Tools for Managing Australian Tree Crops project. In its initial phase, it covered commercial avocado, macadamia, and mango orchards larger than 2 hectares, offering a clear 'baseline' of production area distribution.

In 2022, during Phase 2, the map was refined to include orchards smaller than 1 hectare, increasing accuracy. Now, under the new project *Spatially enabling tree crop production practice (AS23000)*, UNE's Applied Agricultural Remote Sensing Centre (AARSC) aims to further enhance the map. The update will introduce a higher-level spatial layer capturing detailed orchard information at the block level. This data will be secured and accessible only to Australian Mango Industry Association (AMIA), supporting crucial industry decisions.

As shown below, the simple outline map (left) is what is shown on the publicly visible Australian Tree Crop Map, and the detailed map (right) is what will be shown on the secured industry-only map, with the different varieties visible.

Improving Data Collection and Utilisation

The project driving the new mapping tools is co-funded by the Future Food Systems CRC, Hort Innovation, University of New England and includes five Australian tree crop industries (avocados, bananas, citrus, mangoes and macadamias). Using the AARSC's 'Block-Builder' app, each industry body, with the support of collaborating growers will input detailed information like variety, planting date, and management practices.

The higher level of data collated within this next generation map will enable the mango industry to make more informed decisions, such as improved biosecurity preparedness, annual production and export market access, respond to issues such as water security, natural disasters and susceptibility to climate stresses (flooding, drought, disease).

"The end goal is two mapping products—one as the publicly accessible map, which only shows the location and extent of tree crops and the second which is secured for viewing by industry-only, as a high-value data collection, collation, analysis and presentation tool"

CRAIG SHEPHARD, AARSC

Yield Forecasting Advancements

In both *Multi-scale Monitoring Tools for Managing Australian Tree Crops* projects, as well as in a subsequent PhD study, the UNE AARSC team developed and validated two methodologies for forecasting mango yield. The first method involved calibrating high-resolution satellite imagery with fruit count from 18 individual trees per orchard. The second method used historic time-series satellite imagery combined with weather data to better understand and benchmark seasonal variations in orchard growth and annual yield. While both methods provided highly encouraging results, the second method, or time-series method, was favoured as it required no in-field fruit counts, utilised free satellite imagery, and could provide forecasts well before harvest. The downside, however, was historic block-level yield data and forecasts were limited to orchard block and farm level predictions.

Through the *Spatially enabling tree crop production practice (AS23000)* project, the AARSC team will collaborate with Australian Mangoes to develop forecasting models at a regional level using historic yield data. These forecasts aim to improve volume predictions for both industry and individual businesses, reducing the time and resources needed while enhancing supply chain planning. They may also assist in identifying newer constraints limiting mango production in some regions. We encourage support from all growers as we envisage that the outcomes of this project will be as successful as those achieved for the avocado industry where yield forecasting using the 'time-series' method is now conducted across seven countries among the largest global producers.

Building Capacity for the Future

Australian Mangoes' Industry Development team has completed training on the mapping tools, enabling them to update and manage the map internally. All collected data remains secure and accessible exclusively to the Australian Mangoes team, safeguarding sensitive information.

With this new phase of research, the map is set to become an even more integral part of the Australian Mango industry's ability to respond to challenges and plan for the future.

AUSTRALIAN MANGOES SPATIAL HUB

Visit the Spatial Hub on your desktop or mobile device by scanning the QR code or click here.

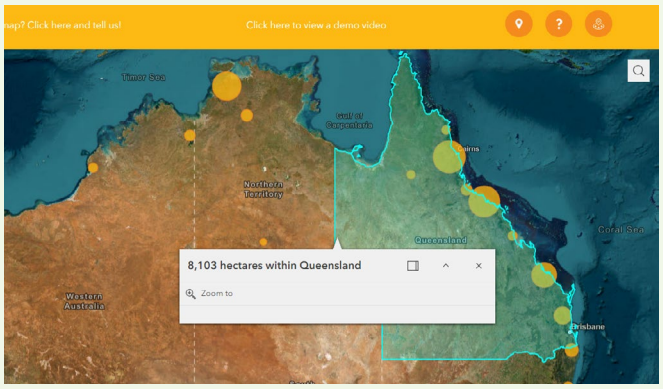
The Spatial Hub, developed by the AARSC, offers a single access point to a range of mapping tools.

Search Function & 'Bookmark' Tool

Easily navigate using the search function or 'Bookmark' tool.

Australian Tree Crop Map

At the national level, the map shows the total area of mango orchards by state or territory. Zooming in reveals mango-growing regions and local government areas. At the most detailed level, individual orchard outlines appear.



Summarise Area Tool

Use the 'Summarise Area' tool to define an area of interest on the map to calculate the total mango orchard area (in hectares) within that area.

More Information

For more information on the ATCM contact AARSC Senior Researcher Craig Shephard craig.shephard@une.edu.au or for the yield forecasting contact AARSC Director Prof. Andrew Robson andrew.robson@une.edu.au.

Funding Acknowledgment: *The Spatially enabling tree crop production practice (AS23000) project is supported by the Future Food Systems CRC, Hort Innovation, UNE and industry partners including the Australian Mango Industry Association.*

AARSC Applied Agricultural Remote Sensing Centre · une University of New England · Hort Innovation · Future Food Systems

Optimising Supply Chain Temperatures for Delivering Longer Shelf Life Mangoes

John Agnew, Senior Horticulturist, QLD Department of Primary Industries

Identifying cold chain issues

Real-time data loggers were used to monitor 16 consignments of Pinata Farms Honey Gold mango from the Northern Territory (NT) to Melbourne in 2023/24 season. The average supply chain temperature exceeded the recommended 15-16°C in 60% of consignments.

Sample trays were collected upon fruit arrival and quality was assessed before storing at 20°C. Mangoes were then progressively assessed recording the date at which they reached end of shelf life based on firmness (over soft) or presence of rots and other major defects.

These higher handling temperatures generally resulted in shorter shelf life (Figure 1).

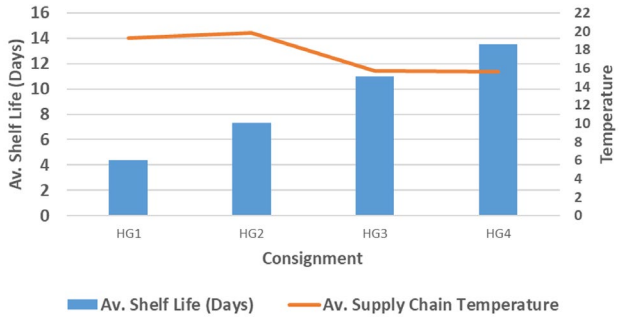


Figure 1. Honey Gold mango average shelf life versus average supply chain temperature (2023/24) in four random consecutive consignments.

In one of these consignments from Darwin to Melbourne in November 2023; temperature management was particularly poor (Figure 2).

The consignment was dispatched at 20.3°C while the average temperature along the supply chain was 19.3°C.

At collection by the assessor, the mangoes showed advanced ripening with all fruit at full yellow colour stage 6 (Image 1). The average shelf life was only 4 days.

Image 1: Tray of Honey Gold fruit from a Darwin consignment collected on the day of arrival in Melbourne showing advanced ripening. The fruit, held at 20°C, had an average shelf life of 4 days.

Correcting cold chain issues

The temperature monitoring highlighted an opportunity for Piñata Farms who had previously mainly used real-time loggers for determining the ETA of trucks in the market. The business started checking pulp temperature of NT consignments during pre-cooling, waiting until fruit were 15°C before dispatch. They also began inserting real-time temperature loggers in every load and stipulated that the road transport set temperature be lowered to within the recommended range.

The benefits of these changes were seen by early December 2023 in a Katherine to Melbourne consignment which was dispatched at 15.1°C and averaged 15.7°C in the supply chain (Figure 3). It is interesting to note that temperature of the mangoes drops after Adelaide as the NT loads are trans-shipped in Adelaide and transported to Melbourne by a different company.

Image 2: Tray of Honey Gold mangoes from a Katherine consignment collected on the day of arrival in Melbourne. The fruit, held at 20°C, had an average shelf life of 13 days.

60% of the fruit arrived at colour stages 2-3 (Image 2). The average shelf life was 13 days which met market requirements.

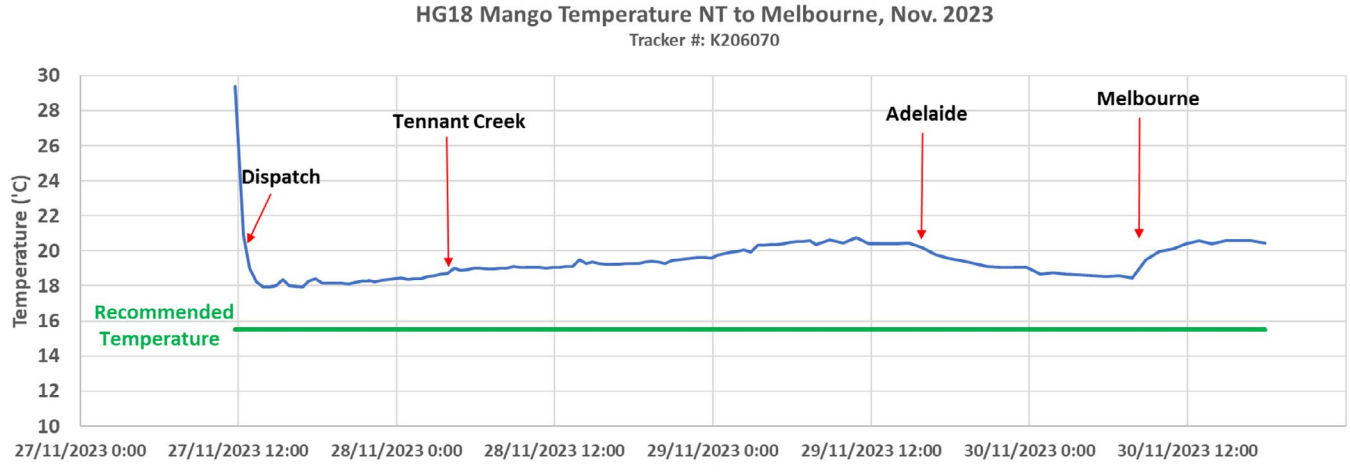


Figure 2: Temperature of Honey Gold mango from Darwin to Melbourne, Nov 2023.

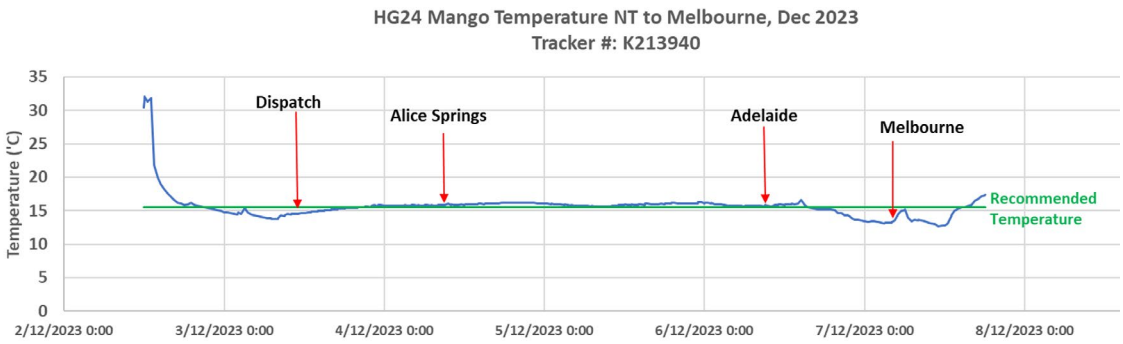


Figure 3: Temperature of Honey Gold mango from Katherine to Melbourne, December 2023.

Gavin Scurr (Pinata Farms Principal) said that "working with DPI in the Serviced Supply Chains II project was of major benefit as it has improved communication with growers and supply chain partners and revealed that transport and storage temperatures can be reduced without compromising eating quality".

While high handling temperatures were associated with poor shelf life, other factors may also be involved. Excessive and prolonged wet weather impacted spray programs, increased rots and delayed harvest. Longer consolidation times on farm, at pack shed and market bottle necks led to fruit arriving at the DC more advanced than desirable.

The project team have correlated supply chain temperatures and time to market to remaining shelf life. 2024/25 consignment monitoring results, in conjunction with 3 seasons of research trials, are being used to validate a shelf life prediction model for Honey Gold mango. This model will be released to the industry soon.

More Information

The mango work is part of a broader project called Serviced Supply Chains II.

Hort Innovation | Serviced supply chains II (AM21000)

Acknowledgment: *The Serviced Supply Chains II project (AM21000) is funded by the Hort Innovation Frontiers Fund, Avocado and Strawberry research and development levy, and contributions from the Australian Government, with co-investment from the Department of Primary Industries, Queensland (DPI), Department of Energy, Environment and Climate Action, Victoria (DEECA), Department of Agriculture and Fisheries, Northern Territory (DAF), Department of Primary Industries and Regional Development, Western Australia (DPIRD), Pinata Farms Pty Ltd and Summer fruit Australia Ltd. Hort Innovation is the grower-owned, not-for-profit research and development corporation for Australian horticulture.*

Growing Degree Day Targets for Fruit Development of Australian Mango Cultivars – A New Chapter

Marcelo Amaral, Cameron McConchie, Kerry Walsh - Central Queensland University, Rockhampton and Geoff Dickinson, Department of Primary Industries, Mareeba

Why?

Fruit development is influenced by both time and temperature. Heat units, also known as Growing Degree Days (GDD), measured from time of flowering, provide a more accurate indication of when fruit will mature than calendar days. For example, a KP tree that flowers on 1st June in both Darwin and Bundaberg will mature on 25 September and 6 December, respectively, in an 'average year' due to the cooler conditions at the southern site.

In a previous article in 2022, we introduced an online calculator that helps estimate fruit maturation timing based on heat units. This tool uses flowering dates and in-orchard temperature data collected remotely. A key part of this calculation is the 'target' heat unit value, which is specific to each mango variety. However, past recommendations for mango heat units have often been based on rough estimates of average orchard flowering and harvest times, typically from a single season and region. Additionally, there has been little research to confirm the 'minimum temperature threshold' (Tb), below which fruit development is assumed to stop, or the 'maximum temperature threshold' (TB), above which maturation slows down.

Our current work seeks to confirm and extend our previous recommendations, with focus on Australian-grown cultivars Honey Gold, Keitt, Nam Dok Mai, Kensington Pride, R2E2, NMBP 1201, NMBP 1243 and NMBP 4069. For each cultivar, we aim to determine both the optimal heat unit target and the most accurate minimum (Tb) and maximum (TB) temperature thresholds.

How?

To determine an accurate heat unit target for each mango variety, we used in-orchard temperature monitoring stations rather than relying on BOM or farm stations located farther from the orchard.

Rather than estimating flowering stages across an entire block, we tagged individual panicles to track development more precisely. Fruit from these tagged panicles was harvested at multiple points around the expected maturity date, based on the existing recommended Growing Degree Days (GDD) targets (see Amaral et al. 2022, Figure 1).

Figure 1. (A) The protocol for establishing a heat unit target for a cultivar involved tagging of individual panicles and maturity assessment non-destructive (b) and destructive (c) of resulting fruit at several dates, to establish the date of optimum maturity. Additional treatments had a ripening library (d) to support maturity and define fruit shelf life. Local temperature was logged using a SensorHost (Rockhampton) sensor.

Each harvest included 5 to 20 fruit, with measurements of NIR-dry matter (DM), oven-DM, fruit size, soluble solids concentration (SSC), acidity, flesh colour, and firmness used to determine when the fruit had reached optimal harvest maturity.

We also assessed the 'hanging time' of some fruit populations by continuing harvests beyond maturity until the fruit reached a firmness of 2kgf (measured using a penetrometer with a 12mm diameter plunger), which is 'firm eating stage'.

LoRa (long range radio) enabled temperature sensors were mounted in weather screens (SensorHost, Rockhampton, Australia) mounted on a star-picket 1.2m above grass covered ground. Sensors were located approximately 5m from orchard trees. Sensor data was recorded at 15 minute intervals. An exception was the Katherine Research Station, where an on-site GoannaAg (Adelaide, Australia) weather station was used.

The GDD between flowering and fruit harvest maturity was calculated from the daily maximum and minimum temperatures for each trial site, using different values of Tb and TB.

Where and When?

Trials were conducted on commercial farms and on two research stations in Queensland and the Northern Territory, spanning latitudes from 12° to 23°S. The study was carried out over three seasons (2021, 2023, and 2024) and included multiple cultivars (Table 1).

At several sites, the research was integrated with another study where trees were tip-pruned at monthly intervals, resulting in trees flowering at different times.

Region	Sites	Cultivars	Season
Darwin, NT	5	KP, R2E2, Honey Gold, Nam Dok Mai	2021, 2023, 2024
Katherine, NT	2	NMBP 1243, NMBP 1201, NMBP 4069, Lady Jane, Lady Grace	2023, 2024
Kununurra, WA	1	NMBP 1243, NMBP 1201	2023
Mareeba, QLD	5	KP, R2E2, Honey Gold, Keitt, Palmer, NMBP 1243, NMBP 1201, NMBP 4069	2023, 2024
Rockhampton, QLD	2	KP, R2E2, Honey Gold, Keitt, Nam Dok Mai	2021, 2023, 2024

Table 1. GDD assessment sites

What?

Tb and TB recommendations

The variation in the calculated GDD values for a given cultivar across different locations was measured using the 'Coefficient of Variation' (standard deviation divided by mean). This was done using a range of Tb and then TB values in the calculation of GDD, calculated from estimated harvest maturity GDD values from three sites/seasons for each cultivar. The Tb and TB that resulted in the lowest variation in GDD across locations were identified as the most reliable and recommended for use in future GDD calculations.

The Tb giving the lowest variation was similar for three cultivars (KP, HG and R2E2), at between 11°C and 12°C (Figure 2). The use of 12°C for Tb is recommended as this value is already in use in the Australian industry.

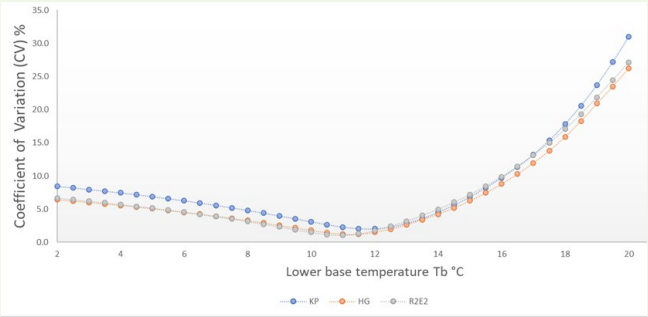


Figure 2. Variation (coefficient of variation) associated with using different Tb values for three cultivars, calculated from estimated harvest maturity GDD values from three sites/seasons for each cultivar.

The optimal TB (basal maximum temperature) was 32°C (above which maturation is delayed with increasing temperature) for KP, HG and R2E2. Keitt appeared to tolerate a higher temperature (higher TB) but further work is required to confirm this result.

GDD recommendations

The suggested GDD values for fruit maturation varied from previous recommendations, being earlier for some cultivars and later for others (Table 2).

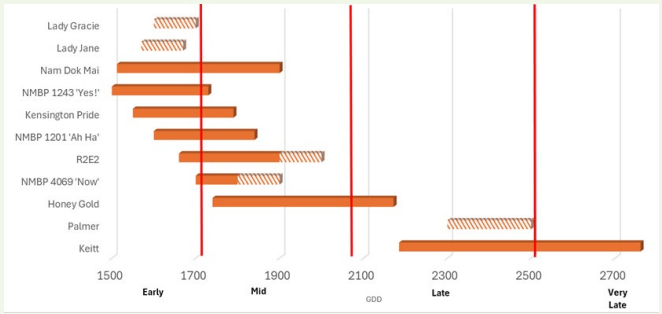


Figure 3. Variation in the GDD window between harvest maturity (based on flesh colour, brix to dry matter ratio and total acidity) and fruit ripening on-tree (based on flesh firmness of 2 kgf). Shaded bars represent end dates based on a linear extrapolation of the decrease in flesh firmness for the last actual measurement of firmness. Red lines represent a general definition of early, mid, late and very late season varieties.

Cultivar	Old GDD target	Source	New GDD target	Hanging time (GDD)	Status (data quality)	Comment
KP	1600	Diczbalis et al 1997	1550	250	validated	earlier than previous recommendation
R2E2	1800	Moore et al 2010	1660	240	to repeat	earlier, but need to confirm another year
Honey Gold	1800 *adjusted	Winton 2013	1740	330	validated	earlier
Keitt	2100	Ozuna-Garcia 2013 (different Tb/flower stage)	2185	576	validated	
Palmer	NA	NA	2200	NA	to repeat	similar to Keitt, but lower hanging time
Nam Dok Mai	NA	NA	1500	388	to repeat	depends on use, usually harvested and commercialized as green mango (could be before 1500 GDD)
NMBP 1243	NA	Henriod and Sole, 2017 (different Tb)	1450	250	to repeat	1-2 weeks before KP (if flower at the same time), but usually flower later than KPs
NMBP 1201	NA	NA	1600	NA	to repeat	similar to KP
NMBP 4069	NA	NA	1650	NA	to repeat	similar to R2E2
Lady Jane	NA	NA	1570	NA	to repeat	similar to KP
Lady Grace	NA	NA	1650	NA	to repeat	similar to KP

Table 2. Old and new recommendations for GDD from flowering (asparagus stage) to fruit maturity, and from maturity to ripe-on-tree (hanging time), for 13 cultivars. All GDD calculated with Tb = 12 and TB = 32. At harvest time, 100 GDD is equivalent to 1 - 1.5 calendar weeks

The variation between old and new recommendations was around 120 units, which is equivalent to 8 and 14 days at harvest time in Darwin and Bundaberg, respectively.

Harvest window

A 'harvest window' was presented for 11 cultivars as the GDD window between that at harvest maturity and that associated with tree-ripe fruit (flesh firmness of 2 kgf) (Figure 3). While tree-ripe is obviously beyond commercial harvest, this presentation gives an idea of variation between cultivars in potential harvest window. Such information has practical value in terms of farm design, with plantings of trees of different cultivars to achieve an extended production window. Note that this does not consider the variation in the time of flowering times, with some varieties requiring more 'time' and 'cool weather' to flower than others.

What next?

Work will continue in the upcoming season to validate the recommendations. Other work is ongoing around manipulation of floral induction.

Funding Acknowledgment: *This project has been funded by Hort Innovation, using the mango research and development levy and contributions from the Australian Government. Hort Innovation is the grower- owned, not-for-profit research and development corporation for Australian horticulture*

Advancing the Mango Industry with Research & Development

The Australian mango industry is continuously evolving through various research and development (R&D) initiatives aimed at addressing challenges, enhancing production, and driving innovation. This update highlights a selection of ongoing multi-fund and Hort frontiers projects, from biosecurity preparedness to advanced genetic research.

Please note: While some of these projects do receive mango levy funds, a majority (e.g., breeding, genetics) do not receive any mango levy funds and are funded through other funding streams, such as the Hort Frontiers Fund.

MULTI-FUND PROJECTS

Improving biosecurity preparedness in the Australian mango industry (MT24011).

Delivery partner: AMIA

This project, which commenced in late 2024, aims to strengthen business biosecurity resilience and improve industry biosecurity preparedness. The five key focus areas of the project are: surveillance for key exotic and regionally important pests; development of regional biosecurity plans; development of risk appropriate orchard biosecurity plan templates and guides; fruit movement protocol to allow the continuation of trade from an affected area in the event of an exotic pest incursion; development of a mango-specific Owner Reimbursement Cost Framework.

National bee pest surveillance: transition program (MT21008).

Delivery partner: Plant Health Australia

Between June and November 2024 more than 1,600 surveillance activities were performed across Australia. These locations included high-risk (core) ports and additional in-kind locations. Targeted surveillance for high-priority pests including exotic and regionalised bee pests was conducted using a range of field-based activities and laboratory diagnostic techniques. No exotic pests were detected during this reporting period at these locations.

Consumer behavioural data program (MT21004).

Delivery partner: Nielsen

Data from this project has been made more accessible through the launch (in June 2024) of a new platform - Hort IQ.

Horticulture Statistics Handbook 2021/22 to 2023/24 (MT21006).

Delivery partner: Freshlogic

Australian Horticulture Statistics Handbook 2023/24, launched February 2025.

Developing a RegTech framework and applications across horticultural value chains (ST22009).

Delivery partner: Freshcare Ltd

FRONTIERS PROJECTS

National tree genomics (AS17000).

Delivery partner: University of Queensland

The National Tree Genomics Molecular Physiology project aims to improve understanding of the molecular mechanisms regulating productivity traits in avocado, mango and macadamia. Ongoing studies are investigating molecular signals associated with growth and flowering in tree crops, precocity in tree crops and tree architecture.

National tree crop intensification program (AS18000).

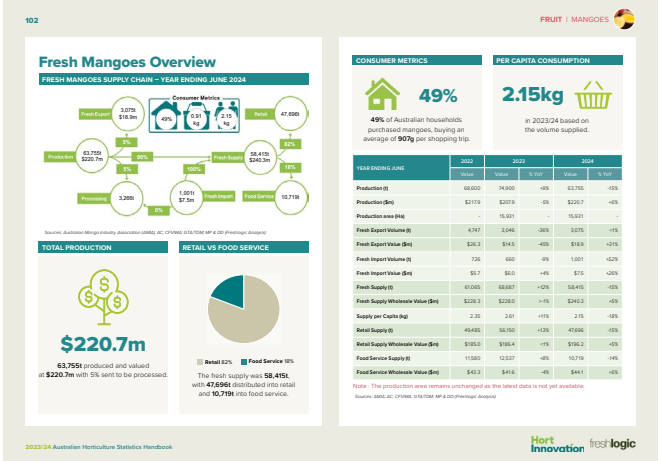
Delivery partner (mango component): QDPI.

Now in its final year, the project team is focused on compiling, analysing and summarising findings for dissemination to both horticultural industry stakeholders and the broader scientific community. During this reporting period, the project contributed nine conference presentations and related Acta Horticulture journal articles to a scientific conference, as well as two articles for industry magazines. The mango component has pivoted activities from initiating new research to concluding existing experiments, synthesising knowledge, and extension to academic and industry communities. In this reporting period attention has focused on concluding orchard activities such as harvesting, pruning, and final sampling of multi-year experiments.

Genetics of fruit sensory (AS19003).

Delivery partner: University of Queensland

The research teams working on pineapple, mango, strawberry, papaya, custard apples and passionfruit, from QDPI, UQ and Griffith University, came together for an annual workshop hosted by QDPI. Ten of the students from the project provided presentations to update their progress, with eight staff presenting on breeding programs and sensory updates. Three new PhD students have joined the project, including one working on genome variation in mango and related species.



Source: Australian Horticulture Statistics Handbook 2023/24

Genetics for next generation orchards (AS23003).

Delivery partner: Queensland University of Technology

This project will develop tools for breeders, growers, and scientists to expedite the development of new cultivars and sustainable growing systems to enhance production and profitability in next generation orchard systems. Specifically, this program aims to identify/characterise the genetic regulation of key productivity traits, integrate molecular markers, develop genomic selection models for current breeding programs that efficiently select plants with desirable traits, and enhance orchard production systems through better interventions with plant growth regulators and new technologies.

Using AI and Machine Learning to improve weather forecasting (AS23005)

Delivery partner: Jane's Weather

This project aims to deliver more accurate and reliable weather forecasting for horticulture growers by combining local farm-based weather station data with global consensus weather forecasting models and the application of Artificial Intelligence and Machine learning. This innovative technology will ensure horticultural growers will have an increase in weather forecasting accuracy, specific to their farm sites, along with enhanced decision-making capabilities for critical weather impacted operations. The project has developed the initial Machine Learning and AI algorithms to ensure key weather variables benefit from weather forecasting that includes a significant reduction in error.

Digital remote monitoring to improve horticulture production and environmental performance (AS23006).

Delivery partner: Applied Horticultural Research

The project is set to achieve its goal of producing a business case for the development of horticultural data sharing platform aimed at enhancing production efficiency while addressing environmental and social performance. A key milestone in the project was the completion of a comprehensive review of major farm management systems currently used across Australia. A series of industry co-design workshops will provide a collaborative space for stakeholders to contribute to the design and development of the project, ensuring practical and impactful solutions are co-created. A project concept will be ready for review by Hort Connections in June 2025.

Biosecurity preparedness for Oriental Fruit Fly and exotic fruit flies (FF18001).

Delivery partner: Macquarie University

A science-based movement guideline, initially submitted to Plant Health Australia (PHA) for review, has been revised based on feedback. PHA also conducted two biosecurity exercises in Sydney and Cairns, with at least 44 participants in both the exercises, to test and refine response strategies against the potential incursion of Oriental Fruit Fly.

Hort Innovation Frontiers®

Making Mangoes Unmissable in Retail Supply Chain

Andrew Burns, Supply Chain Engagement Manager, Australian Mangoes

As highlighted by Hort Innovation in the previous edition of *Mango Matters,* two-thirds of mango consumers purchase on impulse. This means mangoes aren't on consumers shopping lists, making frequent reminders, both before consumers shop and while they're in-store, essential for driving awareness and increasing purchases. To maximise sales, mangoes need to be visible, of high quality and readily available as soon as shoppers enter the store. Not only that, consumers need to have an enjoyable mango eating experience that will encourage repeat purchases throughout the season.

"Be unmissable in retail over the mango season"

In the retail landscape, mango displays were positioned in various locations throughout produce sections. The ideal placement is at the front of the store, with additional strategically placed displays within the produce section, to serve as a reminder to shoppers and increase the chances of impulse purchases.

This season, we continued to drive incremental sales through our ongoing incentive fund, which encourages retailers to generate excitement and creativity around mangoes. This initiative fosters friendly competition among sister stores, challenging them to think outside of the box and break volume records. These activities have been well received by the retailers, and the program has played a key role in increasing mango awareness and sales at store level.

Retailers Investing in Mango Promotions

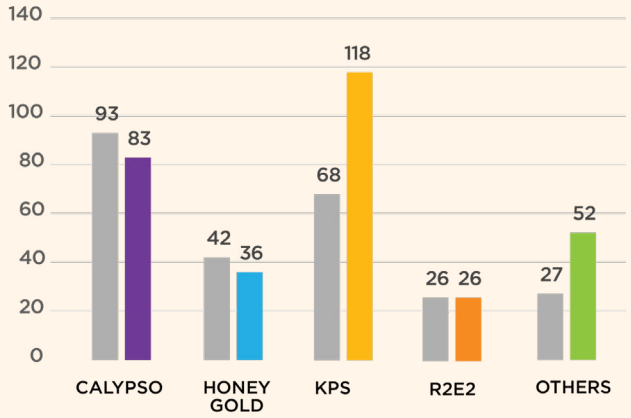
To further support their mango program, retailers have invested in their own national marketing campaigns that showcased Australian mangoes. These efforts included in-store point-of-sale materials, targeted mango programs, brochures, catalogues and more.

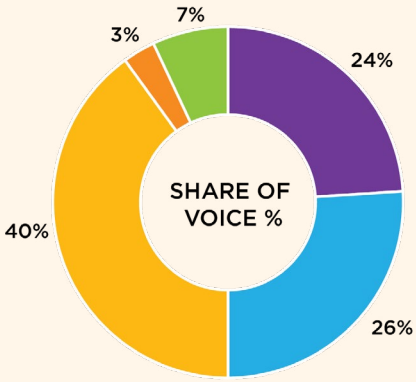
Below are some point-of-sale assets promoted by retailers this year, ranging from varietal descriptors to brochures introducing consumers to different mango varieties and promotional offers. These initiatives represent additional investments in the mango category, complementing the broader mango marketing program highlighted in the previous edition of *Mango Matters*.

Retailer brochure and newspaper advertising activities were tracked and measured, and the 2024/25 season saw a 23% increase in communication/marketing activity compared to the previous year. The graph below highlights the strong retail focus on the Kensington Pride variety this season, following a challenging 2023/24 season. Both the number of advertisements and the share of voice increased significantly.

RETAILER PRINTED ADVERTS

Sept – Feb 24/25

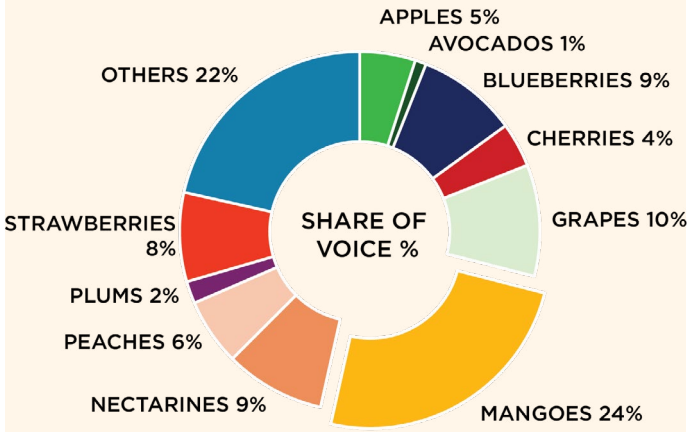




Source: Wiser – Numerator

SHARE OF VOICE

Sept – Feb 24/25



Source: Wiser – Numerator

Equipping Retailers with the Right Tools

The *Australian Mango Retail Guide*, has been a valuable resource for retailer operations teams, providing essential information to educate produce teams on handling, merchandising and key facts about mangoes. The guide covers topics such as characteristics of Australian mangoes, where they come from, varieties and availability, health benefits, proper in-store handling, understanding ripeness, handling at home, and the best way to enjoy mangoes. During the off-season, we will be updating the retail guide to ensure retailers are prepared for the 2025/26 season.

Expanding Opportunities in New Zealand

Australian Mangoes was invited to present to approximately 200 produce managers in New Zealand at the Woolworths produce Christmas planning sessions. Held over two days in Auckland and Hamilton, these sessions covered key topics from our mango retail guide, followed by Q&A sessions and live demonstrations on the best ways to prepare a mango. Store visits before and after the presentations reinforced that, while New Zealand is our largest export market, there is significant potential for further growth through improved execution at the retail level.

2024-2025 Mango Season Marketing Program Results

Elyse Allum, Brand Manager, Hort Innovation

The Australian Mangoes marketing program is funded by Hort Innovation, using grower levies. Developed in consultation with the mango marketing strategic investment advisory panel (SIAP), the 2024-2025 mango marketing program comprises of three strategic pillars:

PILLAR 1

Celebrate the iconic joy that is mangoes

PILLAR 2

Be unmissable in retail over the mango season

PILLAR 3

Share the joy of Aussie Mangoes beyond our shores

The objective of the marketing plan was to make positive increases in household penetration season to season by continuing to own that mangoes are the joyful, iconic taste of Australian summer. The target audience for the campaign was main grocery buyers (18+), with marketing activities targeting key periods within the season including season launch, mid-season, and end of season.

With two thirds of consumers purchasing mangoes on impulse, Australian mangoes were advertised across a range of both pre-store and in-store, mass reaching media channels, to drive consumer awareness and demand on their path to purchase journey.

Domestic channels included: shopping centre panels (out of home advertising), social media advertising (Facebook and Instagram), YouTube advertising, Coles and Woolworths online digital advertising, and sponsorship of the Brisbane Markets mango auction public relations activity. While export channels included: shopping centre panels and social media advertising in New Zealand and in-store display activity and consumer sampling in United Arab Emirates.

The campaign ran from October 2024 until March 2025 and is now completed, with results by channel shown here:

Season launch public relations activity

Heralding the start of the mango season, on 3 October 2024, Aussie Mangoes sponsored the Brisbane Markets mango auction, where the symbolic first mango tray of the season was auctioned, raising funds for charity. Gaining extensive media attention, the event generated over 187 pieces of earned media coverage across broadcast television, radio, online and print media.

Shopping centre panels

Shopping centre panels (out of home advertising) are advertising placements on screens in close proximity to supermarkets, with the objective of capturing the attention of shoppers and creating reminders on the consumer's path to purchase.

Throughout the 2024-2025 season, Australian Mango advertisements were live on screens in both metro and regional markets throughout the entirety of the campaign (October – March).

Over 5.4 million consumers were reached throughout the campaign at a strong, cost-efficient rate of only $0.23 per 1000 consumers reached (reach measures the number of consumers exposed to the advertisement). Throughout the campaign we received strong bonus placements (free placements above and beyond the ones booked based on media provider's availability), with 246 delivered, resulting in a campaign value of $657K, on an $86K investment.

Coles and Woolworths online digital advertising

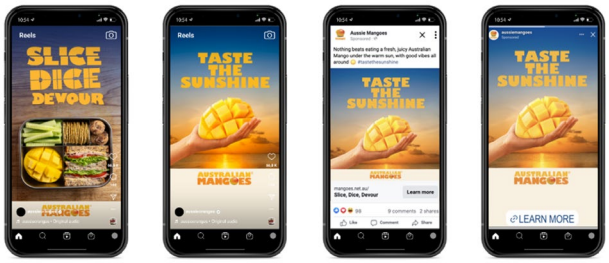
Throughout the 2024/2025 season, online retail media advertising encouraged add to basket purchase on Woolworths and Coles online shopping platforms. Results are provided 6 weeks post campaign completion and will be shared in future.

Social media advertising

On social media, 'Slice, Dice, Devour' and 'Taste The Sunshine' mango advertisements were live across both Facebook and Instagram throughout the entire season, with the objective of reaching consumers at mass and driving in season reminders and consumption inspiration pre-store. 5 million Aussies were reached via social media advertising throughout the campaign at a strong, cost effective rate of $1.80 per 1000 consumers reached.

In addition to the 'Taste the Sunshine' and 'Slice, Dice Devour' creatives, an additional 'on the go' advertisement aimed at driving new consumption occasions for mangoes was implemented as a test and learn on social media. This advertisement features a mango in a lunch box to highlight how easy it is to enjoy a mango outside of the home. The new advertisement encourages parents to include mangoes in their children's lunch boxes, creating habitual consumption from a young age. At the same time the campaign inspires adults to opt for a refreshing mango when they are away from home, with the meal inspiration featured appealing broadly across different age demographics.

With only $5K media spend behind the 'on the go' asset on social media, we saw strong results with over 1.5 million consumers reached, for cost per reaching 1000 people at $1.88, helping us to provide consumption inspiration and drive an additional consumption occasion for mangoes.



YouTube advertising

Using the largest video sharing platform globally, YouTube enabled us to promote Australian mangoes and increase awareness of mango key messaging with Australian consumers throughout the season. Leveraging both 6 second and 15 second advertisements to prompt consumers to add to their shopping list, over 4.2 million Aussies were reached throughout the campaign, with 93.5% of consumers completing the videos in full.

Export 'Taste the Sunshine' advertising campaign

Australian mangoes were promoted in export markets with the objective of building in market awareness and driving consideration for Australian mangoes with export consumers. This included:

New Zealand:
Leveraging the domestic 'Taste The Sunshine' creative assets, the New Zealand marketing program included advertising across shopping centre panels and social media (Facebook and Instagram). Activity ran from November until the end of December 2024. On shopper centre panels, we had a total over 130 screens across 50 Woolworths (Countdown) stores, and reached a total of 624K people, while on social media over 1.7 million consumers were reached throughout the campaign.

United Arab Emirates:
In the UAE, retail marketing activities launched on 7 November 2024 for 4 weeks of retail promotions. This activity included in-store display activations and instore consumer sampling in partnership with LuLu Hypermarkets, and was conducted in six locations across Dubai, Abu Dhabi, and KSA. Overall, LuLu's hypermarkets reported a 85% sales increase when the campaign was live vs the non-promotional period when Aussie mangoes were available.

Al Barsha, Dubai, UAE

Al Wahda Mall, Abu Dhabi, UAE

Hort Innovation

For further information please contact:
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New Resources: Carbon Videos for Horticulture Producers

As part of a Carbon Outreach project, the Queensland Department of Primary Industries has released a new set of carbon information videos tailored for horticulture. These resources provide independent, industry-specific insights into carbon accounting, emissions reduction, and carbon farming opportunities.

Led by Liz King, the project has delivered 32 presentations to over 1,300 producers across horticulture, livestock, and grain industries. Key messages include:

- Carbon reporting requirements are increasing – Large retailers may soon require emissions data from suppliers. While not mandatory for all growers, preparing now can help ensure a smooth transition.
- Free industry-specific carbon calculators are available online to help growers estimate their emissions.
- Basic farm records are enough to calculate a carbon footprint – Most producers can estimate their farm's emissions and product carbon intensity in 10-15 minutes.

To make this information accessible to all producers, the project team has created a six-part YouTube series, each video about 10 minutes long:

- Why report on my carbon?
- Climate science update
- What's my carbon number?
- Why reduce my carbon?
- How to reduce my carbon?
- Am I missing out on making money?

More Information

Contact Noel Ainsworth
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Acknowledgment: *The Carbon Outreach project is part of the Farm Business Resilience Program, which is jointly funded by the Australian Government's Future Drought Fund and the Queensland Government's Drought and Climate Adaptation Program.*

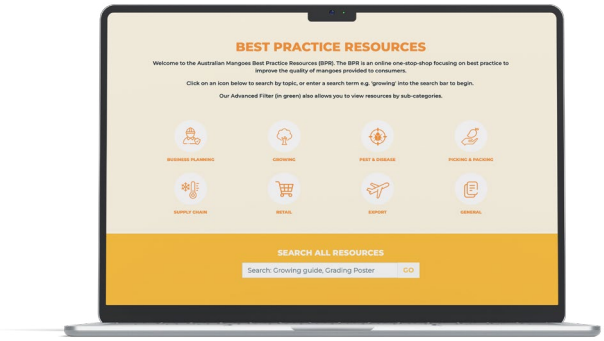
Best Practice Resources Hub

Explore our Best Practice Resources (BPR) section on the Australian Mangoes website—a growing knowledge hub of essential tools, guides, and expert information tailored to support the mango industry. Whether you're a grower, packer, or exporter, you'll find valuable resources to help you stay informed, compliant, and efficient.

HOW TO FIND WHAT YOU NEED

Accessing resources is simple and easy!

- **Browse Categories:** Click through to a category and explore the list of resources.
- **Search Function:** Type keywords into the search bar to quickly find specific topics.



EXCLUSIVE RESOURCES FOR AMIA MEMBERS

As a member, you get access to exclusive tools including:

- MRL App (available on iOS and Android)
- Cost of Production Spreadsheet

Not a member? *Visit our website for more information*

Need help or have a suggestion? We're here for you!

If you can't find what you're looking for, reach out and we'll be happy to assist you.

Have an idea for a new resource?
Let us know, and we'll explore creating it.

Contact Us: 07 3278 3755 or com@mangoes.net.au

Best Practice Resources Hub

Scan the QR Code or visit:

www.industry.mangoes.net.au

EXPLORE THE MAIN CATEGORIES:

BUSINESS PLANNING

Find tools and guidelines to help keep your operations safe, compliant, and efficient. From safety tools to compliance guidelines, this section ensures your business is well-equipped for success.

GROWING

Access resources on orchard management, irrigation, nutrition, and approved agrichemicals to support effective and sustainable mango production.

PEST & DISEASE

Discover resources on biosecurity, pest and disease management, and chemical use to protect your fruit and ensure quality.

PICKING & PACKING

This section includes resources on crop forecasting, traceability, fruit grading, ripening, and more, drawn from recent levy-funded projects.

SUPPLY CHAIN

This section provides essential resources to help optimise your mango supply chain, from temperature management to logistics.

RETAIL

Maintain fruit quality throughout the supply chain, ensuring it meets consumer expectations and stands out on shelves. Best practice resources are key for retail success. This section is still under development but includes a guide to help retailers train their staff on Australian mangoes.

EXPORT

The Export section provides valuable resources to support Australian mango growers in gaining access to international markets and navigating export requirements. It includes information on export registration, assistance, funding, and compliance with maximum residue limits (MRLs).

GENERAL

Find valuable industry background, historical data, production insights, and export information to deepen your understanding of the mango industry.


AUSTRALIAN®
MANGOES