

What happened in the **Mango Fund** last year?

Annual Report 2020/21



About Hort Innovation and the Mango Fund

Hort Innovation is the grower-owned, not-for-profit research and development corporation for Australia's horticulture sector. We work closely with industry to invest the mango R&D and marketing levies, together with Australian Government contributions, into key initiatives for growers, through the Mango Fund. We're extremely proud of the work we do to help drive productivity, profitability and demand for mango growers, and for the horticulture sector at large.

Throughout another challenging year for the horticulture sector, activity in the Mango Fund remained strong. Read on for an overview of what was delivered.

We also encourage you to download a copy of the overarching Hort Innovation Annual Report 2020/21 at www.horticulture.com.au/annual-report-portal to better understand how Hort Innovation worked for the benefit of the horticulture sector during the year.

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\$635,224

invested in R&D



\$760,888

invested in marketing



14

active R&D investments



\$1.1M

in levies collected

by the Government and passed on to Hort Innovation for investment



8%

Australia's mango production volume grew at an average annual rate of eight per cent over the five years to 2019/20



11%

Some 11 per cent of Australia's mangoes are exported, having grown from \$25.2 million in value in 2014/15 to \$33.7 million in 2019/20



51%

The majority of mangoes are grown in the Northern Territory with 51 per cent of production, closely followed by Queensland with 45 per cent

These facts and more can be found in the Australian Horticulture Statistics Handbook, which is delivered by Hort Innovation each year. The handbook is packed with horticulture statistical information and analysis for some 75 categories, for use by individual industries and the wider sector. The 2019/20 edition was released in early 2021 and features an interactive dashboard format for desktop users. See www.horticulture.com.au/horticulture-statistics-handbook.

Just some of the things delivered for you during the year



Preparation support for pest incursions such as fall armyworm and serpentine leafminer, including emergency minor use permits and longer-term investments to bolster the horticulture sector's response



The industry communications program, delivering key publications including *Mango Matters*, *My Mango* and *The Slice*, plus the industry website, www.industry.mangoes.net.au



The mango best management practice and capacity building initiative, which has a range of work – from supporting growers in maturity testing and providing crop flow tables, through to export development activities



The mango Harvest to Home dashboard providing regular household purchase data and insight reporting, at www.harvesttohome.net.au



A domestic marketing campaign and **The Good Mood Food** across-horticulture campaign to support industries through the effects of another challenging year – see www.horticulture.com.au/the-good-mood-food*



Investments in the Hort Frontiers strategic partnership initiative to address longer-term and often complex issues and opportunities critical to the future of Australian horticulture – see www.horticulture.com.au/hort-frontiers*

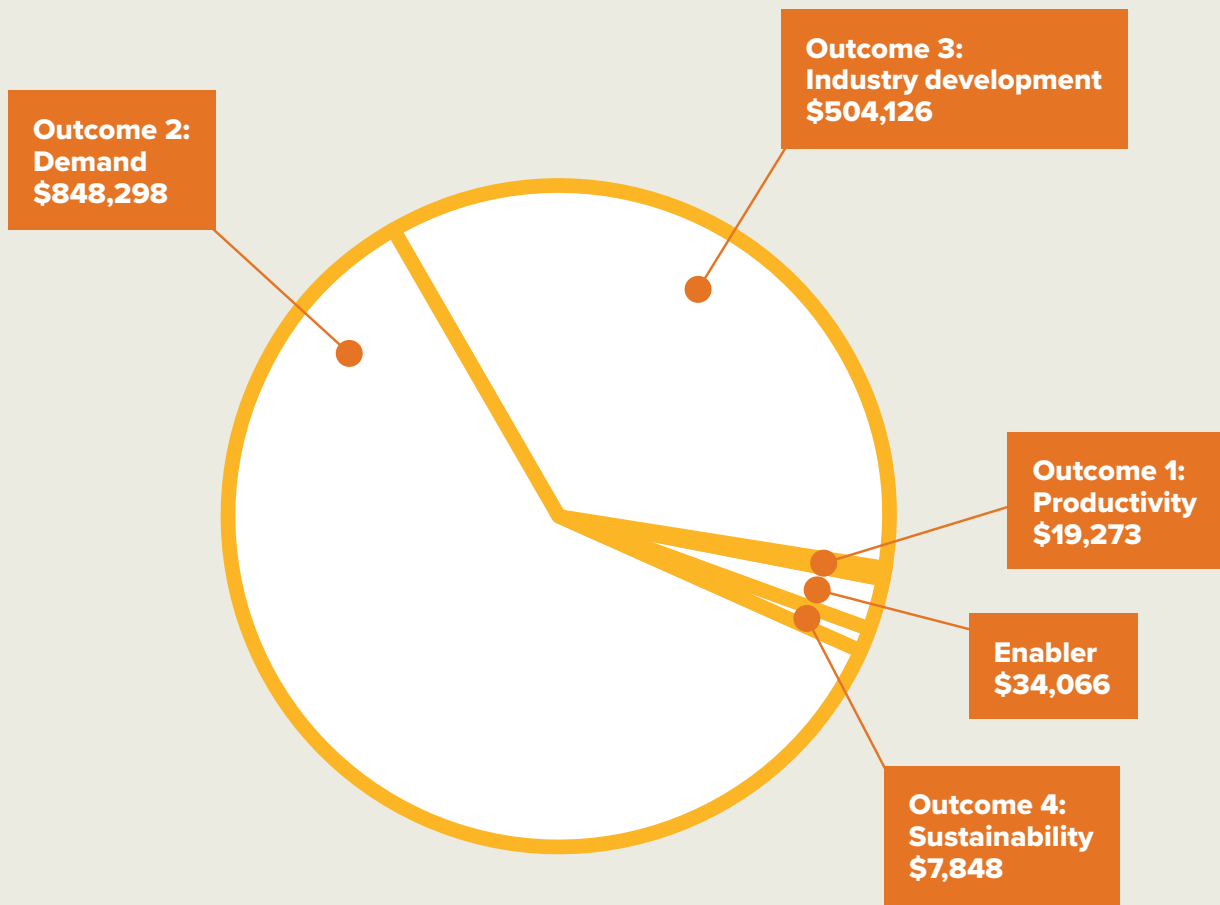


Projects supported by grants secured by Hort Innovation, ranging from cross-sector Rural R&D for Profit initiatives to horticulture-specific work to aid in access to crop protection products – see the Hort Innovation Annual Report 2020/21 for more*

You can visit www.horticulture.com.au/mango at any time to access information on new, ongoing and completed projects, and to download resources produced by levy investments such as fact sheets and guides.

*These initiatives were delivered outside of the Hort Innovation Mango Fund and, in most instances, did not involve the industry levy

Here's what your fund invested in over the year



Investments that are specific to the Hort Innovation Mango Fund are guided by the mango Strategic Investment Plan (SIP). The SIP features priority outcome areas that have been identified and agreed upon by the industry, and Hort Innovation works to invest in R&D and marketing initiatives that are aligned to these.

In the above chart, you can see how project expenditure in the Mango Fund during 2020/21 was aligned to the SIP. Each project has been allocated to a SIP outcome based on its primary objective.

Expenditure on projects classified as 'enabler' support the broader delivery of the industry's strategic investment plan, such as impact assessments.

Which projects were in each of the SIP outcome areas?

Outcome 1: Productivity

Increased industry productivity through increased yields and reduced costs per hectare

Project title and code	2020/21 investment	Status	More information
Mango industry minor use program (MG16004)	\$2,039	Ongoing	hortinn.com/mg16004
Generation of data for pesticide permit applications in horticulture crops 2019/20 (MT18018)	\$16,304	Ongoing	hortinn.com/mt18018
Generation of data for pesticide applications in horticulture crops 2018 (ST17000)	\$930	Ongoing	hortinn.com/st17000-mango

Outcome 2: Demand

Increased grower profitability through increased consumer demand for Australian mangoes

Marketing activities during 2020/21 contributed to demand-related outcomes in the SIP. You can read more about the mango marketing campaign on p10.

Project title and code	2020/21 investment	Status	More information
Conditional non-host systems protocol for fruit fly in mango (MG17005)	\$43,982	Completed	hortinn.com/mg17005
Essential market access data packages (MT14052)	\$30,694	Ongoing	hortinn.com/mt14052
Horticulture trade data (MT19005)	\$5,821	Ongoing	hortinn.com/mt19005

Investments

Outcome 3: Industry development

Increased R&D and extension capacity and resources supporting industry development

Project title and code	2020/21 investment	Status	More information
Building best management practice capacity for the Australian mango industry (MG17000)	\$350,000	Ongoing	hortinn.com/mg17000
National mango industry communication program (MG17004)	\$118,674	Ongoing	hortinn.com/mg17004
Consumer behavioural and retail data for fresh produce (MT17015)	\$25,390	Ongoing	hortinn.com/mt17015-mango
Across horticulture support for export MRL compliance (MT19006)	\$10,061	Ongoing	hortinn.com/mt19006

Outcome 4: Sustainability

Improved industry sustainability and management of risks

Project title and code	2020/21 investment	Status	More information
Review of national biosecurity plans (MT17003)	\$7,848	Ongoing	hortinn.com/mt17003



Financial operating statement

Mango Fund Financial operating statement 2020/21

	R&D (\$)	Marketing (\$)	Total (\$)
	2020/21 July – June	2020/21 July – June	2020/21 July – June
OPENING BALANCE	77,685	411,203	488,888
Levies from growers (net of collection costs)	472,509	629,778	1,102,287
Australian Government money	375,975	—	375,975
Other income*	647	2,779	3,426
TOTAL INCOME	849,131	632,557	1,481,688
Project funding	635,224	760,888	1,396,112
Consultation with and advice from growers	10,585	6,913	17,498
Service delivery	106,142	158,462	264,604
TOTAL EXPENDITURE	751,951	926,263	1,678,214
Levy contribution to across-industry activity	—	—	—
CLOSING BALANCE	174,865	117,497	292,362
Levy collection costs	11,267	15,255	26,522

* Interest, royalties

Levy collection costs – These are the costs associated with the collection of levies from industry charged by Levy Revenue Services (LRS)

Service delivery – Also known as Corporate Cost Recovery (CCR), this is the total cost of managing the investment portfolio charged by Hort Innovation

Making sure that levy investment decisions align with industry priorities

What will be the Mango Fund's focus over the next five years?



The mango Strategic Investment Plan (SIP) was created in 2021 to reflect current priorities for the mango industry. This involved extensive consultation with mango growers and industry stakeholders, including the Australian Mango Industry Association. The SIP is the roadmap that helps guide Hort Innovation's oversight and management of individual levy industry investment programs.

The mango SIP lays the foundation for decision making in levy investments and represents the balanced interest of the particular industry from which the levy is collected. The most important function of the SIP is to make sure that levy investment decisions align with industry priorities.

The mango SIP identifies four outcome areas that will contribute to the productivity and profitability of the mango sector. They are:

- Industry supply, productivity and sustainability
- Demand creation
- Extension and capability
- Business insights.

What projects will the fund be investing in next year?

The mango Annual Investment Plan (AIP) 2021/22 will detail how levy funds will be spent over the 12-month period. Investment decisions will be guided by the industry SIP and prioritised based on potential industry impact, as well as availability of levy funds.

The AIP is developed by Hort Innovation, and is informed by the SIP and industry consultation, including collaboration with the Australian Mango Industry Association. The AIP is then discussed with the industry SIAP for feedback and prioritisation.

All investments will need to link to the industry's SIP by addressing a minimum of one KPI against a strategy under one of the four outcomes.

Annual Investment Plans will be published each year over the lifespan of the SIP and industry stakeholders will be advised via established communication channels.

Hort Innovation will continue to report on fund performance regularly, with more focus on reporting on outcomes and the impact of investments.



When available, you can visit www.horticulture.com.au/mango-fund-management to view both documents and get a full picture of how your levy will be invested over the next five years.

Helping Aussie growers reap the benefits of best practice mango management

Beginning in mid-2018 this investment represents the latest capacity building project for the mango industry.

The challenge

Getting more Australian mango growers to adopt best management practices and ensuring they have the help, hands-on experience, and technology they need to improve the profitability and long-term sustainability of the Australian mango industry.

Meet Ben

Ben Martin is an award-winning mango grower and manager of Marto's Mangoes in Far North Queensland. He's passionate about growing the industry and working collaboratively with other growers to encourage the adoption of best management practices. This program supports the role of an Industry Development Manager, who works closely with Ben to help achieve this.



Ben Martin, mango grower and manager of Marto's Mangoes, Far North Queensland

"I meet with Marine fortnightly and her updates are really valuable to the industry," says Ben. "But the regular forecasts and flow tables provided to growers as part of this program are also an extremely valuable resource. Without an accurate forecast you've got no hope at all of trying to plan industry marketing activities or seeing how the flow of the crops are going. It's a key part of the program."

The program also funded a supply chain temperature management assessment using Escavox trackers. Mango consignments were tracked in real-time, from packhouse to retail distribution centre and wholesalers. Learnings from the assessment will further refine best practice management guidelines, improving fruit quality and retaining more value in the cool chain.

Unfortunately, some growers have been slow to adopt best management practices, reinforcing the need for continued grower education and training programs. "Growers should be aware of what best practice is and the implications," says Ben. "I think the results have highlighted that some growers just aren't at that level yet. Don't get me wrong, there are a lot of great growers out there, but there are still quite a few who still don't get it."



The approach

At its core, the program is facilitating the industry-wide adoption of Best Management Practice, and increasing the reach of the mango industry R&D program.

In addition, the project team are constantly updating grower resources, conducting online workshops, and providing a benchmark of current production practices.

In 2020 the project team also released the *COVID-19 Grower Guide* – a very thorough resource for growers at a particularly challenging time.

The impact

As a result of the program, a suite of extension activities have taken place in key production regions keeping growers and supply chain participants informed of R&D outcomes and Best Management Practice

recommendations. There has also been particular focus in this regard for growers from non-English speaking backgrounds.

The data collected shows that these measures have led to an increase in the adoption of Best Management Practices over the three-year project period.

Growers now also have access to on-farm maturity testing for their crops, measuring dry matter in a non-destructive way, while helping to ensure their orchards meet export requirements, particularly for the key markets of China, Korea and the US.

The program also shared valuable discoveries made around manipulating mango flowering to improve production. It also executed a comprehensive industry comms strategy, providing growers with the latest information on a weekly basis.

For more information, visit hortinn.com/mg17000

Project details

Building best management capacity for the Australian mango industry (MG17000)

Key research provider: Australian Mango Industry Association

Start date: June 2018

Expected end date: March 2022

Estimated value for life of project: \$1,450,607

Making mangoes the ‘must have’ fruit of the season

Hort Innovation is responsible for investing the mango marketing levy into a range of activities to drive awareness and consumption of the mangoes, under the Hort Innovation Mango Fund.

The opportunity

There was an opportunity to drive demand by reframing mangoes as a regular, healthy indulgence, and encouraging domestic and international shoppers to purchase during peak season periods.

The approach

Aussie Mangoes launched the ‘This Season’s Must Have’ campaign, backed by video, outdoor advertising, social media and PR assets.

To promote the launch of the 2020/21 mango season Aussie Mangoes partnered with the Spring Racing Carnival, showcasing a mango-inspired hat by Milliner Neil Grigg, worn by a former Miss Universe Australia. The publicity generated 200 pieces of media coverage, reaching more than 60 million people around the globe.

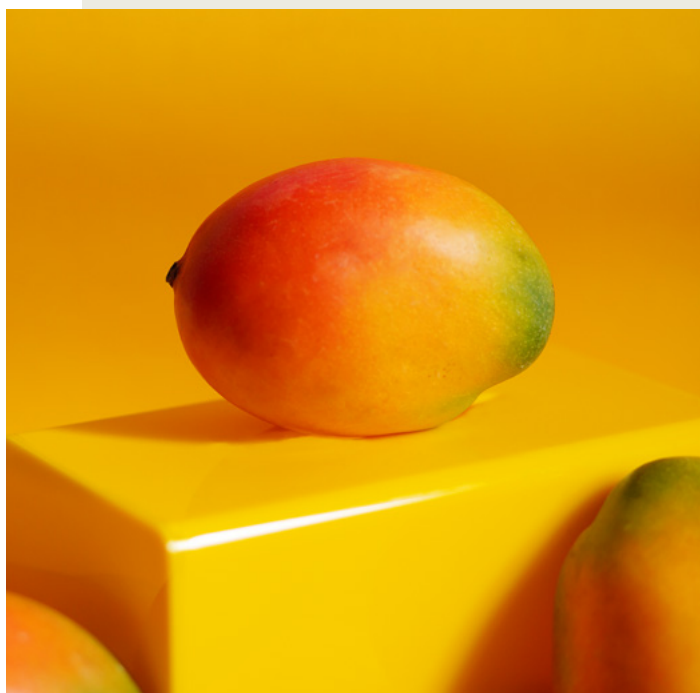
Leading into summer, Aussie Mangoes also partnered with Foodbank Australia to deliver a festive charity calendar, which saw Aussie Mango growers ditch their flanno for high fashion. The campaign secured 250 hits, reaching 46 million people. This included coverage in the Daily Telegraph, reaching 1.8M readers. The season launch also in numerous other media outlets, including NT News, The Courier Mail, 9 News, Studio 10, and 10 news first.

To continue the PR momentum the marketing team commissioned The Good Mood Food Report, showcasing the many benefits of eating Aussie mangoes. The report, backed by expert commentary, generated print and digital coverage, featuring in *Body+Soul*, *The Carousel* and *MINDFOOD*, reaching over 2.8 million people.

On social media, Aussie Mangoes partnered with fashionable influencers to create ‘New Year, new me’ mango recipes, which reached millions of health-conscious millennials.

In addition, from December 2020 to February 2021 Aussie Mangoes ran a YouTube ad campaign, communicating the delicious benefits of mangoes to the target audience, reaching 2.3 million people.

Overseas, Aussie Mangoes invested in four key export markets: New Zealand, South Korea, USA, and Hong Kong. The aim was to build strong, collaborative relationships between growers, exporters, importers, and retailers. Promotional activities included in-store POS (point of sale) material, button badges for store staff, catalogues, outdoor advertising, competitions, social media and influencer activity, and video ads on TV and online.





During the key December to January mango season, Aussie Mangoes took the 'Season's Must Have' campaign to New Zealand, backed by paid advertising across social media and retail locations.

In South Korea, COVID-19 made in-store promotions and sampling untenable, so focus shifted online, growing product awareness and understanding. This included recipe development, and PR and social media activity, backed by influencer engagement. Mangoes also featured on Korean online ordering platform B-Mart, resulting in 22,170 ad clicks and 432,041 views.

2020/21 also saw the *Best Australian Mango Retailer Competition*, which ran across 58 Wellcome and 25 Upscale stores in Hong Kong, along with in-store tastings and price promotions.

In the US, the Aussie Mangoes campaign included POSM, digital ads, mango bins, tent cards, cut fruit stickers, and more.

The outcome

Both at home and abroad, the various marketing activities greatly increased consumer awareness and appetite for premium Australian mangoes, noticeably increasing demand during peak season periods.

"The exposure of the campaigns was really good. Obviously individual companies do their own marketing, but as an overarching campaign, I thought this was pretty effective, especially with the funds available. COVID put an end to some of the event-based activities, which I think actually turned out to be a good thing. Marketing were able to use those funds on other things, which resonated more and worked better."

Gavin Scurr, mango grower, Queensland

Read more about the campaign at hortinn.com/mango-marketing-snapshot

Project details

These marketing activities are strategic levy investments in the Hort Innovation Mango Fund

Minor use permits

The Hort Innovation Mango Fund supports the submission of applications for new and renewed minor use permits for the industry, as well as data generation activities to support chemical permits and registrations, and strategic agrichemical reviews.

Together these efforts provide industry access to safe, relevant and effective chemicals for the management of pests, weeds and diseases.

For full details on these activities and links to relevant information, visit hortinn.com/mango-minor-use.

Permits in 2020/21

During the 2020/21 financial year, a successful new permit application for PER90367, and successful renewals for PER84427, PER12450 and PER83944 were prepared by Hort Innovation and submitted to the APVMA, facilitated through the *Mango industry minor use program* (MG16004). PER14830 was also approved in this period, with the application submitted last financial year.

Meanwhile, fall armyworm – an incredibly destructive exotic pest – was detected on Australian shores for the first time in 2020. To support readiness and protect the horticulture sector, emergency permit PER89870 was issued by Hort Innovation in 2020/21 to acquire crop protection chemicals for the mango industry.

Details for these and all other permits can be found in the following table.

Current permits

Below is a list of minor use permits for the mango industry, current as of 24 August 2021.

Permit ID	Description	Date issued	Expiry date	Permit holder
PER12450 Version 7	Trichlorfon / Specified fruit crops / Fruit fly	06-Oct-11	30-Nov-25	Hort Innovation
PER80374 Version 2	Beta-cyfluthrin (Bulldock) / Custard apple, lychee, mango, persimmon / Various insect pests	01-Oct-15	31-Aug-22	Australian Lychee Growers Association (ALGA)
PER13484 Version 3	Carbaryl / Mango / Mango leafhoppers	01-Jul-12	30-Apr-25	Hort Innovation
PER14743 Version 3	Trichlorfon / Custard apple, lychee, mango and persimmon / Flatid planthopper, flower eating caterpillar, looper and yellow peach moth. Suppression only: Fruit-spotting bug, banana spotting bug, green vegetable bug and lychee stink bug	01-Jun-14	30-Jun-25	Hort Innovation
PER13859	Dimethoate / Orchard cleanup – fruit fly host crops following harvest / Fruit fly	09-Feb-15	31-Jul-24	Growcom
PER84963 Version 2	Ethephon / Mangoes / To manage seasonal vegetative flushes in mango trees	08-Feb-18	28-Feb-22	Australian Mangoes Industry Association (AMIA) C/Hort Innovation

Continued

Minor use permits

Current permits (continued)

Permit ID	Description	Date issued	Expiry date	Permit holder
PER14830 Version 3	Chlorothalonil (Bravo Weather Stik Fungicide) / Mango trees / Anthracnose	04-Feb-15	30-Nov-25	Hort Innovation
PER87232	Etoxazole / Mango trees / Tea red spider mite	16-Jan-19	31-Jan-22	Hort Innovation
PER87799	Clothianidin 200g/L (Sumitomo Shield Systemic Insecticide) / Mango / Mango seed weevil soil drench	06-Jun-19	30-Jun-24	Hort Innovation
PER83944 Version 3	Clothianidin 500g/L (Sumitomo Samurai Systemic Insecticide) / Mango / Med fly, Qld FF and other fruit fly species	27-Nov-17	31-Mar-24	Hort Innovation
PER87164 Version 2	Dimethoate / Specified citrus and tropical and sub-tropical inedible peel fruit commodities – post-harvest dip or flood spray / Various fruit fly species	01-Mar-19	31-Mar-24	Hort Innovation
PER83998 Version 2	Maldison / Mango / Fruit fly	15-Aug-17	31-Aug-22	Hort Innovation
PER84427 Version 2	Methomyl / Mango / Redbanded thrips, chilli thrips, banana flower thrips and tomato thrips	20-Nov-17	28-Feb-24	Hort Innovation
PER85397	Sulfoxaflor (Transform) / Lychee, mango, papaya, and passionfruit (field grown) / Fruit-spotting bug and banana-spotting bug	17-Apr-18	30-Apr-23	Hort Innovation
PER89241	Spinetoram / Various including mango / Fall armyworm	06-Mar-20	31-Mar-23	Hort Innovation
PER89293	Methomyl / Mango / Fall armyworm (<i>Spodoptera frugiperda</i>)	10-Apr-20	30-Apr-23	Hort Innovation
PER89870	Spinosad (Entrust Organic) / Various including tropical and sub-tropical fruit crops (inedible peel) / Fall armyworm	21-Jul-20	31-Jul-23	Hort Innovation
PER90367	Tetraniliprole (Vayego 200 SC Insecticide) / Mango / Mango seed weevil (NSW, NT and QLD)	23-Nov-20	30-Nov-23	Hort Innovation

All efforts have been made to provide the most current, complete and accurate information on these permits, however you should always confirm all details on the APVMA website at portal.apvma.gov.au/permits. Details of the conditions of use associated with these permits can also be found on the APVMA site.

Keep up to date!

Find monthly minor use permit updates in our *Growing Innovation* e-newsletter.

Sign up for free at www.horticulture.com.au/sign-up.

How strategic levy investments are made in the Mango Fund

The below diagram shows how Hort Innovation makes strategic levy investments on behalf of horticulture industries. The mango R&D and marketing levies were invested this way during the year, guided by the mango Strategic Investment Plan 2017-2021 and advice from the industry's investment advisory panel.



* Encapsulating extension and international trade

To learn more about funding specific to the Hort Innovation Mango Fund, visit www.horticulture.com.au/mango. During the year, other sources of funding were also used to support activities for the benefit of Australian horticulture, including grant funding secured by Hort Innovation, co-investment dollars brokered through our Hort Frontiers initiative and centralised strategic levy reserve.

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