# What happened in the Sweetpotato Fund last year?

Annual Report 2021/22



SWEETPOTATO FUND

## About Hort Innovation and the Sweetpotato 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 sweetpotato R&D and marketing levies, together with Australian Government contributions, into key initiatives for growers, through the Sweetpotato Fund. We're proud of the work we do to help drive productivity, profitability, and demand for sweetpotato growers and the horticulture sector.

Read on for an overview of what Hort Innovation delivered in the Sweetpotato Fund during the year.

We also encourage you to download a copy of the overarching Hort Innovation Annual Report 2021/22 at www.horticulture.com.au/annual-report-portal to see how Hort Innovation worked to benefit the horticulture sector during the year.

## In this report...

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invested in R&D



**\$932,836** 

invested in marketing



in levies collected by the Government and passed on to Hort Innovation for investment

#### **Industry facts**



9.5%

Over the five years to 2020/21, Australia's sweetpotato production grew at an average annual rate of 9.5 per cent in value and 6.4 per cent in volume



90%

Of the 104,206 tonnes of sweetpotatoes produced in 2020/21, 90 per cent was distributed as fresh supply (of which 78 per cent went into retail and 22 per cent into foodservice)



88%

Almost all of Australia's sweetpotatoes are grown in Queensland (88 per cent), followed by New South Wales (11 per cent) and Western Australia (one 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. See **www.horticulture.com.au/ horticulture-statistics-handbook**.

## Consumer insights



On average, Australian households bought sweetpotatoes 7.9 times in 2021/22



6.8 million Australian households purchased sweetpotatoes in 2021/22

These insights were made available through the Harvest to Home platform (**www.harvesttohome.net.au**) delivered as part of an investment providing regular consumer behaviour data and insight reporting.

## Just some of the things delivered for you during the year



A new industry communications program to keep sweetpotato growers up to date on R&D and marketing activities, as well as other industry news – see hortinn.com/pw21000

**An emerging leaders' program** to build capability within the sweetpotato industry and grow participants' knowledge and skills – see hortinn.com/pw21001



**Development of a comprehensive manual is underway** on pre- and post-harvest best practices for reducing skin loss in sweetpotatoes – read more at hortinn.com/pw21002

**Continued work to improve the quality of sweetpotato across the supply chain** through investigating pre- and post-harvest quality issues – see p8 for more details

Access to consumer insights through multi-industry investments to understand consumer behaviours, attitudes and purchase intentions – see www.horticulture.com.au/sweetpotato



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



A domestic marketing campaign – read p10 for more details

**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\*



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 2021/22 for more details\*

You can visit www.horticulture.com.au/sweetpotato at any time to access information on new, ongoing and completed projects, and to download resources produced by your levy investments.

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

## Here's how your R&D levy was invested over the year



The sweetpotato Strategic Investment Plan (SIP) guides investments specific to the Hort Innovation Sweetpotato Fund. The SIP features priority outcome areas identified and agreed upon by the industry. Hort Innovation works to invest in R&D and marketing initiatives aligned to these.

The above chart shows how project expenditure in the Sweetpotato Fund during 2021/22 was aligned to the SIP. We have allocated each project to a SIP outcome based on its primary objective.

## Which projects were in each of the SIP outcome areas?

#### **Outcome 1: Demand creation**

#### Demand creation supports the Australian sweetpotato industry to develop existing and future domestic and international markets.

Marketing activities during 2021/22 also contributed towards the demand creation outcome. You can read more about this year's sweetpotato marketing campaign on p10.

Project title and code	2021/22 investment	Status	More information
A review of the scientific literature on the health and nutrition of sweetpotato (PW20001)	\$29,018	Ongoing	hortinn.com/pw20001
Sweetpotato export strategy (PW20004)	\$36,900	Completed	hortinn.com/pw20004
Australian horticulture international demand creation (ST21007)	\$2,438	Ongoing	hortinn.com/st21007

#### **Outcome 2: Industry supply, productivity and sustainability**

The Australian sweetpotato industry has increased profitability, efficiency and sustainability through innovative R&D, sustainable BMPs and varieties.

Project title and code	2021/22 investment	Status	More information
Plant Biosecurity Research Initiative – Phase 2 (HA19007)	\$629	Ongoing	
Field-based testing for fall armyworm, Spodoptera frugiperda (MT19014)	\$2,000	Completed	hortinn.com/mt19014
Regulatory support and coordination (pesticides) (MT20007)	\$2,329	Ongoing	hortinn.com/mt20007
Strategic Agrichemical Review Process (SARP) – Updates (MT21005)	\$4,750	Ongoing	hortinn.com/mt21005
<b>Review of the biosecurity plan for the sweetpotato industry</b> (PW17000)	\$6,000	Ongoing	hortinn.com/pw17000
Integrated pest management of nematodes in sweetpotatoes (PW17001)	\$600,613	Ongoing	hortinn.com/pw17001
Sweetpotato industry minor use program (PW18002)	\$350	Ongoing	hortinn.com/pw18002
Improving quality of sweetpotato across the industry supply chain (PW20000)	\$38,267	Ongoing	hortinn.com/pw20000
Causes and management strategies for skin loss in sweetpotatoes (PW21002)	\$188,228	Ongoing	hortinn.com/pw21002

#### **Outcome 3: Extension and capability**

Improved capability and an innovative culture in the Australian sweetpotato industry maximises investments in productivity and demand.

Project title and code	2021/22	Status	More information	
	investment	Status		
Leadership development program (MT18016)	\$2,068	Completed	hortinn.com/mt18016	
Sweetpotato industry communications program (PW21000)	\$30,780	Ongoing	hortinn.com/pw21000	
Sweetpotato Emerging Leaders Program (PW21001)	\$9,000	Ongoing	hortinn.com/pw21001	

#### **Outcome 4: Business insights**

The Australian sweetpotato industry is more profitable through informed decision-making using consumer knowledge and tracking, trade data, production statistics and forecasting and independent reviews.

Project title and code	2021/22 investment	Status	More information
Vegetable cluster consumer insights program (MT17017)	\$14,666	Completed	hortinn.com/mt17017- sweetpotato
Horticulture trade data (MT19005)	\$4,076	Ongoing	hortinn.com/mt19005
Consumer demand spaces for horticulture (MT21003)	\$2,384	Ongoing	hortinn.com/mt21003
Consumer behavioural data program (MT21004)	\$13,421	Ongoing	hortinn.com/mt21004
Foodservice foundational market insights (MT21011)	\$6,542	Completed	hortinn.com/mt21011
Creative campaign evaluation (MT21012)	\$1,508	Ongoing	
<b>Pilot program: Consumer usage, attitude and brand tracking</b> (MT21201)	\$569	Completed	hortinn.com/mt21201
Consumer usage and attitude tracking 2022/23 (MT21202)	\$12,254	Ongoing	hortinn.com/mt21202
Price elasticity of demand for sweetpotato (PW20003)	\$27,110	Completed	hortinn.com/pw20003



## **Financial operating statement**

#### Sweetpotato Fund

#### Financial operating statement 2021/22

	R&D (\$)	Marketing (\$)	Total (\$)
	2021/22 July – June	2021/22 July – June	2021/22 July – June
OPENING BALANCE	1,125,289	1,141,761	2,267,051
Levies from growers	454,099	936,285	1,390,384
Australian Government money	620,046	_	620,046
Other income*	1,953	2,902	4,855
TOTAL INCOME	1,076,097	939,187	2,015,284
Project funding	1,055,895	932,836	1,988,731
Consultation with and advice from growers	663	442	1,105
Service delivery	183,534	191,696	375,229
TOTAL EXPENDITURE	1,240,092	1,124,974	2,365,066
CLOSING BALANCE	952,049	936,930	1,888,980
Levy collection costs	9,245	19,044	28,289

\* Interest, loyalties

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 Sweetpotato Fund's focus over the next five years?



Hort Innovation developed the sweetpotato Strategic Investment Plan (SIP) in 2021 to reflect current priorities for the sweetpotato industry, involving extensive consultation with sweetpotato growers and industry stakeholders, including the Australian Sweetpotato Growers' Incorporation. The SIP is the roadmap that helps guide Hort Innovation's oversight and management of individual levy industry investment programs.

The sweetpotato SIP lays the foundation for decision-making in levy investments and represents the balanced interests of the sweetpotato industry. The most important function of the SIP is to make sure that levy investment decisions align with industry priorities.

The sweetpotato SIP identifies four outcome areas that will contribute to the productivity and profitability of the 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 sweetpotato Annual Investment Plan (AIP) 2022/23 details how Hort Innovation spends levy funds over 12 months. The sweetpotato industry SIP guides investment decisions, and our consultation process prioritises investments based on potential impact and levy fund availability.

Hort Innovation publishes Annual Investment Plans each year over the lifespan of the SIP and advises industry stakeholders via various communication channels.

Hort Innovation will continue to report on fund performance regularly, focusing on outcomes and the impact of investments.

Visit www.horticulture.com.au/sweetpotato-fund-management to view both documents and better understand how Hort Innovation invests your levy.

#### Sweetpotato Annual Investment



## Improving the quality of sweetpotatoes

## The sweetpotato industry is working with growers, supply chain participants and retailers to lift quality

Quality is the main driver for buying sweetpotatoes for 63 per cent of Australian households, according to levy-funded research through the Hort Innovation Sweetpotato Fund investment *Australian sweetpotato consumer insights research* (PW18003).

Based on this research, there is a significant opportunity to shift 'medium users' (45 per cent of the sample) of sweetpotatoes to doubling their consumption. This group primarily buy sweetpotatoes on impulse, and quality will significantly impact their purchase behaviour. 'Light users' can also be influenced to increase purchases, but this can be addressed by improving their knowledge of sweetpotatoes and how to use them. A small shift in purchasing frequency in these two consumer segments could double consumption by these consumers. A new Hort Innovation Sweetpotato Fund investment began in 2021 to improve the quality of sweetpotato across the industry by engaging key stakeholders across the value chain, including growers, wholesalers and retailers, so quality can be monitored and maintained in the long term.

Improving quality of sweetpotato across the industry supply chain (PW20000) is investigating pre- and postharvest quality issues for Australian sweetpotatoes and is developing a business case for quality improvements in the supply chain. This is being explored through supply chain quality reviews on-farm in Queensland and at retail level in Victoria, mimicking a typical supply chain.

Industry adoption of the recommendations will be driven through direct engagement, newsletters and grower roadshows. The program will monitor the adoption of these recommendations by the sweetpotato industry.

#### Meet Matthew Prichard, sweetpotato grower from Cudgen, Northern NSW

## Our industry was concerned about the quality of sweetpotatoes we saw in retail displays.

They weren't up to the standard that we thought they should be, so we began to work with Hort Innovation on a levy-funded investment into improving the quality of sweetpotatoes across the industry supply chain. The ultimate aim of the project is to improve quality to drive sales.

There are three areas where you can experience problems that impact sweetpotato quality and can lead to consumer dissatisfaction – on-farm, during the supply chain and with retailers. This project works to align growers and supply chain participants such as transporters, agents, merchants and retailers. Getting on the same page and ensuring we're driving in the same direction will help increase sales of sweetpotato through bringing new consumers into the category and encouraging existing consumers to buy more (increasing purchase frequency and average weight of purchase).



Matthew Prichard, Northern NSW sweetpotato grower.



The first stage is about figuring out what's happening on the shelf so that we can get a baseline on the standard of sweetpotatoes right now and understand what factors affect their quality. Our project partners, Kitchener Partners and Quality Associates, are collecting initial data instore across Coles, Woolworths, ALDI and independent supermarkets.

We've found so far that skin damage is the main factor causing issues on the shelf. These issues originate on-farm, so when we saw that information come through, we decided to put skin damage top of mind when making decisions. For example, gentle handling will be the top priority when we look to replace equipment through the harvesting process or the packing line.

The next thing we've found is that some temperature and humidity issues are occurring in the supply chain. It looks like the sweetpotatoes are experiencing significant changes in temperature, which can increase problems like bacterial pitting.

In response to this finding, the project has changed to include using almost a thousand trackers that will monitor location, temperature and humidity in realtime. This will tell us exactly where the problems are happening on-farm and along the supply chain. We've got five sweetpotato farms participating in that part of the program.

The retailer engagement component of the program is all about showing retailers what is happening on the shelf and providing them with strategies and solutions to improve their handling of sweetpotatoes. For example, a possible solution to some of the problems we're facing would be to move sweetpotatoes into the banana supply chain because they have similar needs in terms of temperature management compared to standard potatoes, which can withstand lower temperatures. The Hort Innovation Sweetpotato Fund has also invested in a project looking at causes and management strategies for skin loss in sweetpotatoes. These two projects will work together really well. The *Causes and management strategies for skin loss in sweetpotatoes* (PW21002) project is working with Louisiana State University, the world leader in sweetpotato research. Being able to leverage their knowledge and techniques will be hugely beneficial for our industry.

I'm looking forward to seeing how this project progresses and how I can change my methods on-farm to improve the quality of our sweetpotatoes. It's all about figuring out where the issues are happening and addressing them. As a grower, I'm making efforts to provide better quality sweetpotatoes from the farm so that the retailer receives high-quality potatoes with less skin damage, stored in better temperature and humidity parameters, so that the customer will get the best sweetpotato experience they can.



A possible solution to some of the problems we're facing would be to move sweetpotatoes into the banana supply chain because they have similar needs in terms of temperature management compared to standard potatoes, which can withstand lower temperatures."

Matthew Prichard, Northern NSW sweetpotato grower

## Tapping into the taste, ease, and versatility of Australian sweetpotato to boost sales

Hort Innovation is responsible for investing the sweetpotato marketing levy into a range of activities to drive awareness and consideration. Here's a quick look at some of the activities and achievements in 2021/22.

In 2021/22, the sweetpotatoes marketing campaign was focused on driving demand and addressing the decline in sweetpotato consumption.

A comprehensive review of the category and consistent industry feedback revealed that although Australians have a strong need for "good carbs" in their lives, sweetpotato has dropped out of their consideration. Consequently, consumers are not thinking about sweetpotatoes when purchasing, or they view them as pub food. There has been an opportunity to move away from the "better pub chip" and re-claim sweetpotatoes as the "good carb", by cementing associations with contemporary food culture to increase demand.

#### Three big shifts were needed to drive demand:

From	То	Strategic priorities
l think that all carbs are created equal	Not all carbs are created equal , sweetpotatoes are "good carbs"	Reclaim the "high ground" in carbs
l just don't think about sweetpotatoes	Sweetpotatoes come to mind easily, and I have lots of ideas about how to eat them	Build prominence to drive consideration amongst more buyers, more often
White potato is what I notice in store as there's so much choice now	Sweetpotato seems to be popular again and there are new options to choose from	Convert consideration to purchase by winning in retail



Continued

#### **Marketing spotlight**



## Reclaiming the "high ground" in carbs

To improve consumers' perception of sweetpotatoes and demonstrate that they are not only a preferable choice but also easy to use, the program leveraged and reinforced sweetpotatoes' distinctive qualities in terms of taste and appearance.

Consumer research revealed that people know sweetpotatoes are sweet and delicious, and no two are the same, which was beneficial to marketing the campaign. To leverage this insight "the crazy good king of carbs" creative campaign leans into sweetpotatoes' unusual and distinctive taste and appearance, embracing its unique qualities.

The "crazy good king of carbs" idea was brought to life via a "Sweetpotato King" persona, that marketed this vegetable as vibrant and superior to other carbohydrates, by demonstrating the huge variety of healthy and tasty dishes it can be used in. Reclaiming its healthy image through advertising reminded audiences that Australian sweetpotatoes hold more value than being an unhealthy pub meal.

A creative testing research study showed that the new creative assets delivered a compelling message to engage consumers with Australian sweetpotatoes. The main messages the assets successfully conveyed was the "superior" (quality) of sweetpotatoes to other carbohydrates and its value in terms of versatility, taste and nutrition.

In 2021/22 the Hort Innovation Marketing function underwent a significant shift in their approach to investing marketing levies. You can read more about this in the 2021/22 Hort Innovation Company Annual Report at www.horticulture.com.au/annual-report-portal.

#### Content

Retail out of home panels, transit advertising, social media posts and in-store displays at the point of sale were just some of the content that was used to support the campaign. This was complemented by an engaging drive-time radio campaign, that included a catchy song about sweetpotatoes to capture listeners' attention.

Here's a taste of the radio ad...



Behold the sweetpotato who rules over the land.

Defeating simple carbs and meals that are quite bland.

Baked and steamed and delicious when fried.

Orange or red or purple inside. Majestic in soups and stews and pies. Rich in vitamins so give it a try. Australian sweetpotatoes. The crazy good king of carbs."

#### Retail

To drive in-store inspiration and encourage shoppers to buy more sweetpotatoes, the Hort Innovation Customer Marketing Team worked with key retailers to generate in-store presence. Before entering the major supermarkets, shoppers would see the retail out of home panels featuring the "King of Carbs."

Major activity in Woolworths included featuring the radio advertisement in-store, a series of magnetic strips near the sweetpotato to highlight taste and health benefits, and a "King of Carbs" display bin throughout July. In IGA stores, a staff display incentive was run, with prizes for stores that featured the best sweetpotato displays. IGA stores provided themed point of sale kits to decorate their stores, with display bins, shelf strips, posters, and recipe cards.

## Minor use permits

The Hort Innovation Sweetpotato 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 to manage pests, weeds and diseases.

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

#### **Current permits**

Below is a list of minor use permits for the sweetpotato industry, current as of 15 August 2022.

Permit ID	Description	Date issued	Expiry date	Permit holder
PER81876 Version 3	Abamectin / Root and tuber vegetables / Vegetable leafminer (suppression only)	24-Jun-16	30-Apr-24	Hort Innovation
PER84249 Version 2	Abamectin, Bifenthrin, Lambda-cyhalothrin, and Methomyl / Potato and sweetpotato / Tomato potato psyllid	16-Jun-17	31-Jul-25	NSW Department of Primary Industries (NSW DPI)
PER14583 Version 5	Chlorpyrifos / Various vegetables including sweetpotato / Sweet potato weevil and wireworm	01-Apr-14	31-Oct-21	Hort Innovation
PER84805	Cyantraniliprole / Sweetpotatoes / Tomato potato psyllid	06-Dec-17	31-Dec-22	Hort Innovation
PER82556	Fluazifop-P / Sweetpotato / Various grass weeds	16-Apr-14	31-Jan-23	Hort Innovation
PER82428 Version 4	Methomyl (Marlin) / Sweetpotato / Helicoverpa, cucumber moth, cluster caterpillar, loopers, webworm, Rutherglen bug, and thrips (including Western flower thrip)	22-Apr-16	31-Mar-24	Hort Innovation
PER13902 Version 2	Phorate (Thimet) / Sweetpotato / Aphids, thrips, jassids and organophosphate susceptible two-spotted mite and wireworm	02-Jan-13	31-Mar-23	Hort Innovation
PER84757 Version 2	Spinetoram (Success Neo) / Root and tuber vegetables / Tomato potato psyllid	28-Nov-17	31-Aug-25	Hort Innovation
PER84245 Version 2	Spirotetramat (Movento) / Potato, Sweetpotato, tomato, capsicum, chilli pepper and eggplant (field and protected cropping systems) / Tomato potato psyllid	07-Apr-17	30-Apr-25	NSW DPI

Continued

#### **Current permits (continued)**

Permit ID	Description	Date issued	Expiry date	Permit holder
PER84743	Sulfoxaflor / Root and tuber vegetables (including sweetpotato) / Tomato potato psyllid	24-Oct-17	31-Oct-22	Hort Innovation
PER12047 Version 4	Thiabendazole (Tecto) / Sweetpotato / Field rots caused by scurf and root rot	29-Jun-11	30-Sep-26	Hort Innovation
PER13151 Version 4	Zinc phosphide (RattOff) / Sweetpotato / House mice and introduced rats	14-Dec-11	31-Mar-22	Hort Innovation
PER89263	Emamectin (Proclaim Opti Insecticide) / Root and tuber vegetables Fall armyworm ( <i>Spodoptera frugiperda</i> )	10-Mar-20	31-Mar-23	Hort Innovation
PER89241	Spinetoram / Various including sweetpotatoes / Fall armyworm	06-Mar-20	31-Mar-23	Hort Innovation
PER89293	Methomyl / Sweetpotato / Fall armyworm ( <i>Spodoptera frugiperda</i> )	10-Apr-20	30-Apr-23	Hort Innovation
PER89353 Version 2	Chlorantraniliprole (Altacor Hort Insecticide Coragen) / Root and tuber vegetables (except potatoes) / Fall armyworm ( <i>Spodoptera</i> <i>frugiperda</i> )	05-May-20	31-May-23	Hort Innovation
PER89870	Spinosad (Entrust Organic) / Various including root and tuber vegetables / Fall armyworm	21-Jul-20	31-Jul-23	Hort Innovation
PER87809	Thiamethoxam + chlorantraniliprole (Durivo) / Various specified crops / Various specified pests (QLD only)	06-Apr-21	30-Apr-24	Northern Agriservices

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.

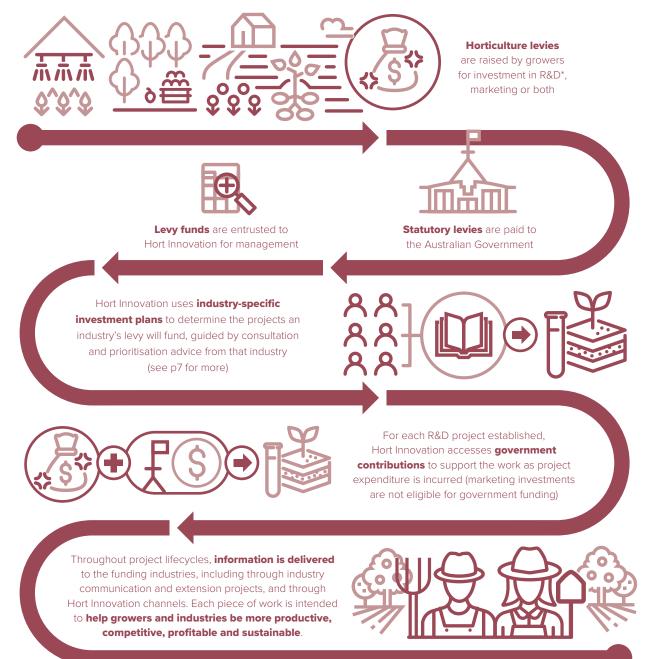
#### Keep up to date!

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 Sweetpotato Fund

The below diagram shows how Hort Innovation makes strategic levy investments on behalf of horticulture industries. The sweetpotato R&D and marketing levies were invested this way during the year, guided by the sweetpotato Strategic Investment Plan 2022-2026 and advice from the industry's investment advisory panel.



\* Encapsulating extension and international trade

To learn more about funding specific to the Hort Innovation Sweetpotato Fund, visit www.horticulture.com.au/sweetpotato. 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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