

What happened in the Citrus Fund last year?

Annual Report 2020/21



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

Throughout another challenging year for the horticulture sector, activity in the Citrus 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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\$4.2M

invested in R&D



\$475,944

invested in marketing



36

active R&D investments



\$2.45M

in levies collected

by the Government and passed on to Hort Innovation for investment



4.2%

Australia's citrus production grew at an average annual rate of 4.2 per cent in the five years to 2019/20



11%

Production value grew at an average annual rate of 11 per cent over the five years to 2019/20



37%

Some 37 per cent of Australia's citrus production volume was exported in 2019/20

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



Biosecurity preparedness work to bolster capacity and technical capability in the citrus industry – see www.horticulture.com.au/citrus



Continued efforts to deliver high-performing rootstocks and protect Australia's citrus genetic material – see www.horticulture.com.au/citrus



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



Industry communication and extension programs, delivering the *Australian Citrus News* magazine, *Citrus eNews* emails, industry forums, and the industry website www.citrusaustralia.com.au



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



A multi-pronged domestic and international 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*

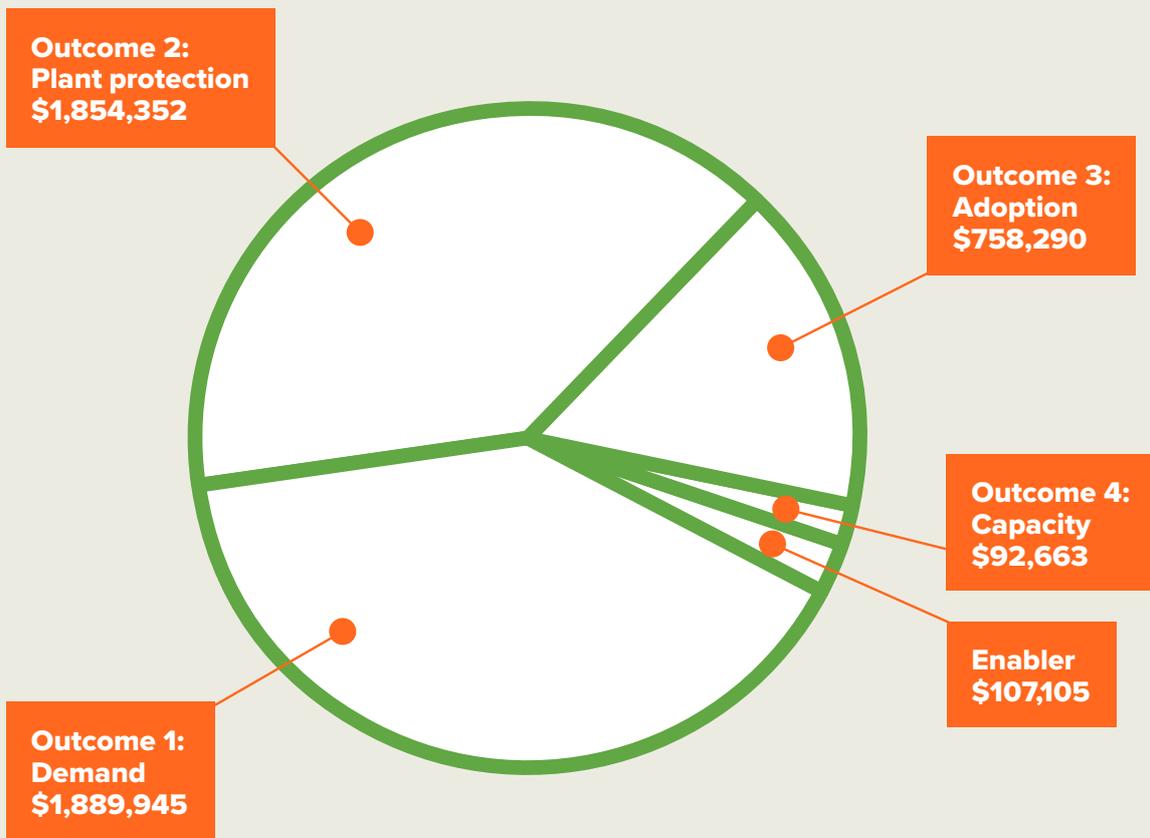


Projects supported by grants secured by Hort Innovation, ranging from cross-sector Rural R&D for Profit initiatives to horticulture-specific work to aid in access to crop protection products – see the Hort Innovation Annual Report 2020/21 for more*

You can visit www.horticulture.com.au/citrus 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 Citrus 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 Citrus Fund are guided by the citrus 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 Citrus 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: Demand

Market opportunities in both domestic and especially export markets have been developed and maintained, leading to increased demand and support for citrus products

Marketing activities during 2020/21 contributed to demand-related outcomes in the SIP. You can read more about the citrus marketing campaign on p13.

Project title and code	2020/21 investment	Status	More information
Developing a national systems approach for meeting biosecurity requirements to access key Asian markets (AM17001)	\$34,500	Ongoing	hortinn.com/am17001
Citrus agrichemical and export MRL program (CT18001)	\$119,112	Ongoing	hortinn.com/ct18001
Citrus market development, market access and quality (CT18002)	\$981,125	Ongoing	hortinn.com/ct18002
Breeding new rootstocks for the Australian citrus industry (CT18004)	\$57,234	Ongoing	hortinn.com/ct18004
Citrus export strategy renewal (CT19006)	\$32,798	Completed	hortinn.com/ct19006
Citrus health and nutrition literature review (CT20004)	\$21,040	Ongoing	hortinn.com/ct20004
Essential market access data packages (MT14052)	\$78,697	Ongoing	hortinn.com/mt14052
Horticulture trade data (MT19005)	\$5,821	Ongoing	hortinn.com/mt19005
Multi-scale monitoring tools for managing Australian tree crops – phase 2 (ST19008)	\$60,000	Ongoing	hortinn.com/st19008

Investments

Outcome 2: Plant protection

Growers and the industry reduce biosecurity, phytosanitary and agrichemical-related risks

Project title and code	2020/21 investment	Status	More information
Improving biosecurity preparedness of the Australian citrus industry (CT17001)	\$224,950	Completed	hortinn.com/ct17001
Improving diagnostics and biosecurity for graft-transmissible diseases in citrus (CT17007)	\$227,082	Ongoing	hortinn.com/ct17007
Protecting Australia's citrus genetic material (CT17008)	\$29,000	Ongoing	hortinn.com/ct17008
Citrus postharvest program (CT19003)	\$205,031	Ongoing	hortinn.com/ct19003
Integrated pest management of citrus gall wasp and Fuller's rose weevil (CT19009)	\$233,809	Ongoing	hortinn.com/ct19009
Strategic review of investments in citrus breeding and evaluation (CT20001)	\$43,704	Completed	hortinn.com/ct20001
Preparedness and management of huánglóngbìng (CT20003)	\$120,000	Ongoing	hortinn.com/ct20003
Citrus industry biosecurity preparedness strategy (CT20006)	\$527,700	Ongoing	hortinn.com/ct20006
SITplus: Port Augusta QFLY SIT factory pilot operation (FF18003)	\$71,429	Ongoing	hortinn.com/ff18003
Improving preparedness of the Australian horticultural sector to the threat potentially posed by Xylella fastidiosa a severe biosecurity risk) (MT17006)	\$33,186	Ongoing	hortinn.com/mt17006
Improving plant industry access to new genetics through faster and more accurate diagnostics using next generation sequencing (MT18005)	\$30,000	Ongoing	hortinn.com/mt18005
National tomato potato psyllid and zebra chip surveillance (MT18008)	\$68,461	Ongoing	hortinn.com/mt18008
Parasitoids for the management of fruit flies in Australia (MT19003)	\$30,000	Ongoing	hortinn.com/mt19003
Xylella insect vectors (ST19018)	\$10,000	Ongoing	hortinn.com/st19018

Investments

Outcome 3: Adoption

Improved product quality and increased productivity from the application of innovation

Project title and code	2020/21 investment	Status	More information
Building a genetic foundation for Australia's citrus future through targeted breeding (CT15017)	\$221,260	Completed	hortinn.com/ct15017
Evaluation of new rootstocks for the Australian citrus industry 2017-2022 (CT17002)	\$122,362	Ongoing	hortinn.com/ct17002
Evaluation of new citrus varieties 2017-2022 (CT17006)	\$118,469	Ongoing	hortinn.com/ct17006
Citrus industry communications program (CT18000)	\$201,200	Ongoing	hortinn.com/ct18000
Afourer mandarin best practice canopy management (CT19002)	\$10,500	Ongoing	hortinn.com/ct19002
Reducing granulation in the production of Imperial mandarins (CT19005)	\$48,829	Ongoing	hortinn.com/ct19005
Citrus Technical Forums 2021 – 2023 (CT20000)	\$35,670	Ongoing	hortinn.com/ct20000

Outcome 4: Capacity

Industry participants have increased skills, capacity and knowledge

Project title and code	2020/21 investment	Status	More information
Citrus harvest handbook (CT19001)	\$57,221	Ongoing	hortinn.com/ct19001
Consumer behavioural and retail data for fresh produce (MT17015)	\$35,442	Ongoing	hortinn.com/mt17015-citrus



Financial operating statement

Citrus Fund Financial operating statement 2020/21

	R&D (\$)	Marketing (\$)	Total (\$)
	2020/21 July – June	2020/21 July – June	2020/21 July – June
OPENING BALANCE	1,736,289	897,640	2,633,929
Levies from growers (net of collection costs)	2,117,309	333,419	2,450,728
Australian Government money	2,457,254	–	2,457,254
Other income*	7,185	18,912	26,097
TOTAL INCOME	4,581,748	352,331	4,934,079
Project funding	4,223,309	475,944	4,699,253
Consultation with and advice from growers	1,922	1,178	3,100
Service delivery – fund specific	689,276	98,730	788,006
TOTAL EXPENDITURE	4,914,507	575,852	5,490,359
Levy contribution to across-industry activity	–	–	–
CLOSING BALANCE	1,403,530	674,119	2,077,649
Levy collection costs	114,122	16,325	130,447

* 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 Citrus Fund's focus over the next five years?



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

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

- Protecting the production base
- Market optimisation
- Communication extension and capability
- Business insights.

What projects will the fund be investing in next year?

The citrus 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 Citrus Australia. 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/citrus-fund-management to view both documents and get a full picture of how your levy will be invested over the next five years.

Boosting citrus biosecurity and grower readiness to respond

This investment is tasked with bolstering biosecurity and technical capability in the Australian citrus industry, and includes a range of preparedness, response and awareness measures.

The challenge

The Australian citrus industry faces several exotic pests with the potential to hamper production and market access. The industry needs a surveillance program to detect these high-priority pests to mitigate potential damage.



Meet Darren

As a fifth-generation citrus grower, Darren Minter knows how important it is to keep biothreats away from his crop. That's why he was keen to enrol his orchard into the program. "This is really important. It's not a case of if, but when with new insects and disease," he says. "Early detection and a quick response will be essential for our survival. We don't want another Queensland fruit fly-like problem. We also need the

program to keep Queensland fruit fly under control, so we don't lose our markets."

Darren's also glad the First Detector Network has returned under this program, along with the addition of a National Citrus Surveillance Coordinator. "These are essential and extremely helpful," he says. "The program's doing a fantastic job keeping it in our minds – reinforcing it with field days and with correspondence."

Continued



The approach

Importantly, this project involves a nationally coordinated surveillance program for early detection of high-priority pests. It provides the data necessary to support the industry, securing market access and trade.

In August 2018, a full-time National Citrus Surveillance Coordinator was appointed under the project, working out of the Citrus Australia offices in Mildura. The coordinator is responsible for working with growers, researchers, industry bodies and the Australian and state government agencies to coordinate citrus surveillance and biosecurity activities across the country.

This incorporates the re-establishment and expansion of the First Detector Network – a network created through an earlier biosecurity program, involving a range of personnel working in commercial orchards, packing sheds and the research community, who regularly undertake inspection and monitoring of trees and fruit during seasonal production, harvesting and packing.

A key element of the coordinator's work is ensuring that growers, consultants, other industry participants and members of the public are more aware of biosecurity and exotic citrus pests.

The role of coordinator will continue through into the next generation of this program.

The impact

This project is keeping the industry's biosecurity strong. In late 2019 the National Citrus Surveillance Coordinator arranged a pilot Asian citrus psyllid (ACP) trapping program on orchards in NSW, Victoria, WA, SA, NT and Queensland. The trial program consisted of 134 traps, each baited with a food-based lure designed to attract ACP. No exotic psyllids were detected, however in some areas local psyllid species were detected, proving the program's effectiveness in training personnel and identifying local populations of psyllids.

In 2020 the program was continued and will expand over time. To date 1,000 sticky traps and ACP lures have been imported from the US. Plastic cages (designed to surround sticky traps and reduce by-catch) have also been purchased (as they're a legal requirement in some jurisdictions to reduce the risk of capturing small vertebrates).

In addition, state and territory agriculture departments have been contacted to discuss and agree to how many traps their diagnostic laboratories are able to process to support the program, and barcodes have been ordered to allow traps to be tracked from the field to diagnostic laboratories.

Basic instructional material has been developed to support the program.

A family of apps, known as MyPestGuide, has also been created. This brings communities together to create a collaborative network of people to report, map and learn about pests and other organisms. It includes a Reporter app, three pest identification field guides, a decision tool and a community website where you can view reports.

For more information, visit hortinn.com/ct17001

Project details

Improving biosecurity preparedness of the Australian citrus industry (CT17001)

Key research provider: Plant Health Australia

Start date: October 2017

End date: June 2021

Estimated value for life of project: \$715,750

Investing in a strong future for Australian citrus exports

We're working with industry to seize new market opportunities and overcome challenges.

The challenge

The Australian citrus industry must continue to meet the needs of its domestic market while ensuring it maintains its strong presence in the global market, all while remaining competitively priced.



Meet Brett

Brett Hullah is a citrus grower in Coomealla, just north of the Murray River in NSW. Exports are an important part of his operation at Grandview Orchards – something he believes is true for the industry as a whole. “Export markets are vital to the Australian citrus economy,” says Brett. “We can produce more than we can consume, and our fruit quality is world renowned. Through growing this market it will continue to provide jobs and revenue for Australian workers, farmers and ultimately contribute to our overall economy.”

Brett says what while it's hard to put an exact dollar value on the benefits he's seen from this program, it's enabled

him to make more informed decisions and put new options on the table. “It's opened up more choices for us – more options as to what markets we can grow and what we need to do to prepare, rather than us all vying for the same market.”

Brett's hopeful the program will continue to deliver for Australian citrus exports and accelerate progress. “Moving forward, I think it will strengthen existing markets and develop new ones through quality produce,” says Brett. “I think this will also drive innovation in the industry, which can only lead to improved produce quality and greater efficiencies in growing practices.”

Continued



The approach

This investment focuses on maintaining and improving citrus market access, delivering market information, and constantly improving product quality. It provides essential support to growers by helping them remain competitive and deliver quality product into overseas markets. It helps establish new opportunities with emerging markets, such as India and Vietnam, while also providing information about current trading conditions so that farmers can make informed decisions about their future supply options. It also gives growers the tools they need to improve processing facilities to increase capacity and efficiency, improving productivity through innovation.

With more than 90 per cent of Australia's citrus export trade to destinations under free trade agreements, the project team continue to provide related technical and commercial advice to government.

The impact

The industry has adjusted to operating under a virtual marketing space, due to COVID-19. There hasn't been the opportunity to visit the market, to view the fruit, and to get a sense for the flow of product, so trust in relationships built as a result of this program has been important. This program also resulted in the development, maintenance and monitoring of the Australian Citrus Quality Standards, which has also had a hugely beneficial impact on industry success.

For more information, visit hortinn.com/ct18002

Project details

Citrus market development, market access and quality (CT18002)

Key research provider: Citrus Australia

Start date: January 2019

Expected end date: December 2023

Estimated value for life of project: \$4,300,858

Ensuring excellent export opportunities for Aussie citrus, despite COVID

Hort Innovation is responsible for investing the citrus marketing levy into a range of activities to drive awareness and consumption of the fruit, under the Hort Innovation Citrus Fund.

The opportunity

Markets in China, Japan, Vietnam, and the Philippines present a huge export opportunity for Australian citrus growers. These regions were targeted under the Taste Australia retail marketing program, driving overseas consumers to buy Australian.



The approach

A strong push into Asian markets was spearheaded by a retail program, featuring point-of-sale material, consumer promos, taste sampling, social media, influencer activity, e-commerce incentives, and trade marketing support.

China saw a record 384 in-store sampling sessions of Australian navel oranges in 2020-21, with 28.9 tonnes (\$370,600 GMV) sold throughout the in-store retail promotion period. Despite a decrease in foot traffic during COVID, online shopping increased greatly, bolstered by an e-commerce promotion across popular platforms Hema Fresh and Pupu Chaoshi. A total of 92.98 tonnes (\$404,507 GMV) of Australian navel oranges was sold throughout this online campaign.

Advertising on busy Chinese rail routes, plus a strong social media campaign, reached millions, with a livestream on popular Chinese streaming service Yizhibo contributing to sales of over 6.65 tonnes to the highly engaged audience.

In Japan, COVID put a halt to retail sampling, and supermarket restrictions hampered point of sale marketing. Consequently, focus shifted to positive PR, influencers and social to drive awareness of Australian oranges.

Japan's most popular food influencers, [Asu Chin](#), [Ayu Jinja](#) and [Manami](#), shared recipes featuring Australian navel oranges across their Instagram accounts, reaching almost 165,000 highly-engaged followers. Taste Australia's Japanese Facebook and Instagram accounts also reached 3.6 million people, placing Australian citrus front and centre.



Continued

Marketing case study



To cement Australian citrus's stronghold on Vietnamese consumers, refreshed marketing collateral reached 95 major stores across the country, capturing consumers with eye-catching colour.

More than 100 sampling sessions were also held across major Vietnamese locations, and a promotion at Big C Garden Hanoi saw customers who purchased 2kg or more of navel oranges receive a gift. The result was an additional 2,966kg of navel orange sales.

In addition, digital advertising on key Vietnamese mobile apps proved successful, with more than 2.5 million impressions among key demographics. Taste Australia's Vietnam Facebook and Instagram pages drove awareness and educated consumers, with a total of 40 unique social media posts reaching more than 6 million, attracting more than 5.6 million shares, likes and comments.

In the Philippines, marketing activities were also constrained by some of the strictest lockdown conditions anywhere in the world, making e-commerce, media and social media the main campaign drivers.

The immune-boosting properties of Australian oranges was a key component of the Philippines campaign, which utilised celebrity chefs and 40 local influencers to penetrate traditional and online media. This activity resulted in 19 pieces of media coverage, reaching more than 9 million people.

The outcome

Despite the challenges of COVID-19, the marketing efforts of the last 12 months have seen Australian citrus make great inroads into key Asian markets, build brand reputation and awareness and importantly, increase sales, especially online.

“

“While we know we have a great product, how do we get our customers and ultimately the end consumer to understand how good our product is compared to that of others? That's where a good marketing and promotion campaign can make a significant difference. The Philippines is a great example of this. This market has been the focus of a Taste Australia marketing campaign and has been building as a market for Australian citrus with strong sales today, and no doubt into the future.”

**Marcus Scott, Sales Manager,
Mildura Fruit Company**

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

Project details

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

Minor use permits

The Hort Innovation Citrus 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/citrus-minor-use.

Permits in 2020/21

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 citrus 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 citrus industry, current as of 24 August 2021.

Permit ID	Description	Date issued	Expiry date	Permit holder
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	1-Mar-19	31-Mar-24	Hort Innovation
PER14772 Version 3	Iprodione (Rovral) / Mandarins (susceptible varieties) and Tangelos / Emperor brown spot	01-Oct-15	30-Jun-23	Citrus Australia Limited (CAL)
PER13859	Dimethoate / Orchard cleanup – fruit fly host crops following harvest / Fruit fly	09-Feb-15	31-Jul-24	Growcom
PER82043	Captan / Mandarins / Emperor brown spot	05-Oct-16	31-Jul-22	CAL
PER89241	Spinetoram / Various including citrus / Fall armyworm	6-Mar-20	31-Mar-23	Hort Innovation
PER89354	Chlorantraniliprole (Altacor Hort Insecticide) / Citrus fruit Fall armyworm (<i>Spodoptera frugiperda</i>)	10-Apr-20	30-Apr-23	Hort Innovation
PER89293	Methomyl / Citrus fruit / Fall armyworm (<i>Spodoptera frugiperda</i>)	10-Apr-20	30-Apr-23	Hort Innovation
PER89870	Spinosad (Entrust Organic) / Various including citrus / Fall armyworm	21-Jul-20	31-Jul-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 Citrus Fund

The below diagram shows how Hort Innovation makes strategic levy investments on behalf of horticulture industries. The citrus R&D and marketing levies were invested this way during the year, guided by the citrus 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 Citrus Fund, visit www.horticulture.com.au/citrus. 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.

Hort Innovation

Horticulture Innovation Australia Limited
ACN 602 100 149

Level 7, 141 Walker Street
North Sydney NSW 2060 Australia

02 8295 2300 | communications@horticulture.com.au

www.horticulture.com.au

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