Citrus Fund







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The projects in this report have been funded by Horticulture Innovation Australia Limited using sources including the citrus levy, Australian Government contributions and, in some instances, co-contributions from a variety of sources.



SUMMARY BY
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We're for growers

At Hort Innovation it's our job to work with industry to invest the citrus levy and Australian Government contributions into initiatives to help growers be as productive and profitable as possible – and 2017/18 was another fantastic year of growing better, together.

With more than \$3.03 million invested by Hort Innovation into R&D for the citrus industry during 2017/18, including into a host of new projects, I'm happy to be able to share with you all the key insights in this Hort Innovation Citrus Fund Annual Report.

You'll find a top-level list of all R&D investments from the year on **p3**, and can explore the research projects in more detail from **p5**. Just some of the highlights include new and ongoing work to deliver new citrus varieties and rootstocks, a host of work to boost orchard productivity and citrus quality, and the range of investments to bolster biosecurity and export.

Meanwhile in marketing, the Citrus Fund program saw close to \$230,000 invested during the year to raise the profile and consumption of Australian citrus. Find an overview of this activity from p13.

On a personal note, thank you for welcoming me as your new Relationship Manager. I know that during 2017/18 my predecessor, Brad Wells, enjoyed getting to connect with you about everything going on in the Citrus Fund, and getting to hear your thoughts and share ideas. During 2018/19 I'm looking forward to doing the same, with even more opportunities to connect in person and a reminder that you can reach me any time at mark.spees@horticulture.com.au or on 0439 574 173 if there's something you'd like to ask or discuss around levy investments.

I also encourage you to explore the easy ways you can stay close to all of the good things your levy is achieving throughout the year...

- » Become a member. Paying a levy doesn't automatically make you a Hort Innovation member, but signing up is free at www.horticulture.com.au/membership. As well as providing the opportunity for voting rights at the organisation's Annual General Meeting, Hort Innovation membership includes exclusive email alerts with industry-specific news and opportunities, direct invitations to explore investment updates and more.
- » Check out Hortlink. This digital publication provides an update on all new, ongoing and recently completed investments in the Hort Innovation Citrus Fund. The latest edition is always available from the Citrus Fund page at www.horticulture.com.au/citrus, while members have Hortlink sent straight to their inboxes.
- Engage with your industry communications program. Levy-funded communication programs are dedicated to bringing the latest information and advice to growers, including news, outcomes and resources related to levy investments. At the time of writing the most recent three-year program, Citrus industry communications (CT15009), was drawing to a close, with Hort Innovation working with industry to establish a new investment to continue its activities. Find details of the new program in a future edition of Hortlink, and look out for the Hort Innovation Citrus Fund logo in its publications to easily identify work related to your levy.

Here's to another great year of investments and connection in 2018/19,

A NOTE OF THANKS FROM THE HORT INNOVATION BOARD

During 2017/18, the Hort Innovation Board of Directors appreciated the opportunity to connect with the industry, through Citrus Australia. An August 2017 meeting with the Board of Citrus Australia and its CEO Nathan Hancock was a chance to discuss matters of common interest ranging from trade and export market growth to achieving the best value for levy investments and to further solidify the approach to working together for the interests of the Australian citrus industry.



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Making levy investments

Discover how the citrus levy and Australian Government contributions are invested through the Hort Innovation Citrus Fund in this quick recap.

Where do investment ideas come from?

Great investments start with great ideas, and Hort Innovation encourages all growers and other industry participants to share their thoughts and suggestions for the research and marketing initiatives they want to see.

Ideas can be submitted any time via Hort Innovation's simple Concept Proposal Form. Visit www.horticulture.com.au/innovation-concept-pipeline.

Ideas can be for your specific industry – to be funded by the industry levy and, in the case of R&D, Australian Government contributions – or they can be for Hort Innovation's strategic partnership initiative, Hort Frontiers. Hort Frontiers projects address broader, longer-term and more complex issues facing Australian horticulture as a whole, and are funded through partnerships with co-investors. Visit www.hortfrontiers.com.au for more.



How are levy decisions made?

Let's talk 'SIPs' and 'SIAPs'!

Investments specific to the Hort Innovation Citrus Fund are guided by the industry's Strategic Investment Plan (SIP), which was finalised by Hort Innovation in June 2017 after close consultation with growers and other industry stakeholders.

The SIP outlines key industry priorities for investment and can be found on the Citrus Fund page at www.horticulture.com.au/citrus.

The SIP document is used like a 'roadmap' by the citrus Strategic Investment Advisory Panel (SIAP) – a panel made up of growers and other industry representatives, which has a key role to play in the investment process. The SIAP discusses investment ideas at consultation meetings, with the SIP guiding them, in order to provide advice to Hort Innovation on potential levy investments.

Details of the SIAP panellists and summaries of the SIAP's meetings can be found at www.horticulture.com.au/citrus.

What happens next?

The SIAP's advice is used by Hort Innovation to work suitable ideas into project proposals. The proposals are then made public for potential delivery partners to submit responses. Current opportunities are always listed at www.horticulture.com.au/delivery-partners.

At the end of the process the responses are assessed, often with the assistance of industry, and the best delivery partner for the work is chosen. A contract is then issued and the work begins.

How can I keep track of investments?

Newly contracted projects are announced in Hort Innovation's Hortlink publication, with the latest edition emailed directly to members three times a year and always available from the Citrus Fund page at www.horticulture.com.au/citrus. Hortlink also provides updates on ongoing and recently completed investments.

The industry communications program also provides regular information on levy-funded activity. See **p9** for more.

R&D project list 2017/18

NEW INVESTMENTS IN 2017/18					
CT17000	Improving citrus quality with regulated deficit irrigation				
CT17001	Improving biosecurity preparedness of the Australian citrus industry				
CT17002	Evaluation of new rootstocks for the Australian citrus industry 2017-2022				
CT17003	Maximising the biosecurity of the Australian citrus industry budwood facility				
CT17004	Independent mid-term evaluation of CT15012 and CT15013				
CT17005	Consumer research in key export markets for the citrus industry				
CT17006	Evaluation of new citrus varieties 2017-2022				
AM17001	Developing a national systems approach for meeting biosecurity requirements to access key Asian markets				
AM17010	Taste Australia trade shows*				
MT17015	Consumer behavioural and retail data for fresh produce				
ST16008	AgVet collaborative forum				

^{*} This investment is a parent program, under which further event-specific Taste Australia investments may sit.



ONGOING	G INVESTMENTS IN 2017/18
CT15005	Protecting Australia's citrus genetic material
CT15006	Development of national strategies to manage citrus gall wasp
CT15008	Development of phenology models and a timing guide for the management of California red scale in Australian citrus
CT15009	Citrus industry communications
CT15010	Australian Citrus Postharvest Science Program
CT15012	Australian citrus industry innovation and market development program
CT15013	Citrus Quality Standards – stage 3
CT15015	Citrus Australia Limited – communication support on CT15009
CT15016	Agrichemical residue monitoring program for Australian citrus exports – stage 2
CT15017	Building a genetic foundation for Australia's citrus future
CT16000	Citrus industry minor use program
CT16700	Citrus technical forums
MT13059	SITplus: Developing and optimising production of a male-only, temperature-sensitive-lethal, strain of Qfly, <i>B. tryoni</i>
MT14052	Essential market access data packages
MT16010	Horticultural trade data 2017-2019
MT16011	Horticulture trade intelligence reporting 2017-2019
ST16006	Generation of residue, efficacy and crop safety data for pesticide applications in horticulture crops 2017





During the 2017/18 financial year, all Australian levy paying horticulture industries also contributed to across-industry projects addressing issues that affect horticulture as a whole. Visit www.horticulture.com.au/across-horticulture for financial documents and information on this program.

MT15033 Strategic Investment Plan

[^] These flagged projects did not involve the industry levy, and were instead funded by Hort Innovation using voluntary contributions and Australian Government funding. They were carried over from the original Horticulture Australia Limited (HAL).

R&D report

Take a closer look at some of the key levy investments in the Hort Innovation Citrus Fund during 2017/18.

Any resources from these and other levy-funded projects – such as fact sheets, guides and more – are published on your grower page at www.horticulture.com.au/citrus as they become available.

Evaluation of new citrus varieties 2017-2022 (CT17006)

NEW IN 2017/18

Key research provider: NSW Department of Primary Industries

Beginning in late 2017, this investment is carrying on work to rapidly and independently assess new citrus varieties under local conditions – providing industry with objective performance data. It is a continuation of earlier levy investments, including the project *Evaluating new citrus varieties 2013-17* (CT12026). Knowledge from the evaluation work is brought to growers through field walks, fruit variety displays and other industry events, while information sheets describing the horticultural performance of all varieties evaluated are also being produced.

Evaluation of new rootstocks for the Australian citrus industry 2017-2022 (CT17002)

NEW IN 2017/18

Key research provider: NSW Department of Primary Industries

This investment commenced in late 2017 to continue evaluating the performance of new rootstocks for the Australian citrus industry. It has a focus on improving the yield and quality of both fresh and processing fruit, boosting tree health by improving tolerance to stresses, and looking at the modification of tree architecture. The goal is to deliver superior and locally-adapted rootstocks to Australian growers, suited to both mainstay and new citrus varieties. The work will ultimately allow growers to intensify plantings, modernise orchards and obtain higher yields with minimal extra inputs, while meeting requirements for existing and emerging markets.

This iteration of rootstock work picks up from the completed *Evaluation and commercialisation of new citrus rootstocks* (CT13042). CT13042 saw the release of six new, high-performance rootstocks – the first release in more than two decades. Information on these rootstocks from China (Zao Yang, Tanghe, Ghana, Donghai, Anjiang hongju and Caoshi xiangju) is available on the NSW DPI website at www.bit.ly/2uX4gG3.

Improving citrus quality with regulated deficit irrigation (CT17000)

NEW IN 2017/18

Key research provider: NSW Department of Primary Industries

Global research shows that a regulated deficit irrigation approach can be applied during the fruit maturation and ripening stages to enhance fruit sugar content, while saving irrigation water – however there are currently no practical recommendations for its implementation in improving citrus fruit quality on-farm.

Beginning in May 2018, this project is conducting irrigation trials to develop a practical irrigation deficit method for the industry. It will subsequently produce guidelines for Australian growers, outlining irrigation practices to enhance citrus fruit sweetness and quality. There will be a particular focus on producing high-quality fruit for export to Asian markets, where there is a preference for sweeter fruit.

Want to keep up to date with the latest information on new, ongoing and recently completed R&D investments throughout the year? Check out Hort Innovation's *Hortlink* publication – the latest edition is always available from your grower page, www.horticulture.com.au/citrus.



Improving biosecurity preparedness of the Australian citrus industry (CT17001)

NEW IN 2017/18

Key research provider: Plant Health Australia

The project acknowledges that the industry faces a number of significant exotic pest threats that have the potential to affect production as well as market access. These include Huanglongbing and its psyllid vectors, citrus canker and citrus variegated chlorosis (Xylella). Its work is intended to bolster biosecurity capacity and technical capability for the Australian citrus industry, and includes a range of preparedness, response and awareness activities. Importantly, the project is set to develop a nationally coordinated surveillance program for early detection of high-priority pests. It will also be able to provide the industry data to support market access and trade.

Consumer behavioural and retail data for fresh produce (MT17015)

NEW IN 2017/18

Key research provider: Nielsen

Contracted in June 2018, this multi-industry investment is tasked with providing regular consumer behaviour data and insight reporting to a range of industries, including the citrus industry. This information is intended to assist growers and supply chain partners in decision-making for their businesses and, for the wider industry, the data and insights will be available to support strategic activities, as well as Hort Innovation Citrus Fund marketing plans.

At the time of writing, the data and insights were soon to be easily accessible via a new online dashboard – look for further information in industry and Hort Innovation channels as it becomes available.

This project represents an evolution of previous investment Understanding the purchase behaviour of fresh produce consumers (MT13061).

Consumer research in key export markets for the citrus industry (CT17005)

NEW IN 2017/18 & NOW COMPLETE

Key research provider: Colmar Brunton

Beginning and ending in early 2018, this short investment was tasked with producing market trend reports with the goal of assisting the Australian citrus industry in sustaining export market growth in key Asian markets and in maximising returns.

The project team conducted trend reporting to build a profile of Australian citrus products in China and Japan, delivering insights including customer trends in these markets to help identify market opportunities. There was also the identification of past trends to help predict the future landscape of these key export markets over the coming years.

Information from this R&D investment will be used to guide future initiatives in the export market space, including a second stage consumer research project and the guidance of levy-funded marketing activities in these international markets.

Protecting Australian citrus germplasm through improved diagnostic tools (CT14009)

NOW COMPLETE

Key research provider: NSW Department of Primary Industries

Running from 2014 into early 2018, this investment was responsible for supporting the NSW DPI Citrus Pathology Program team, in collaboration with Auscitrus, in assessing, developing and validating laboratory diagnostic procedures for a number of endemic graft-transmissible pathogens of citrus, to help secure the high health status of the Australian citrus industry.

By nature these activities were largely technical, and were all geared towards ensuring Australia is using the most reliable, sensitive and efficient testing methods available.

Throughout the project...

- » The NSW DPI citrus pathogen collection was catalogued and expanded – providing a valuable resource to support diagnostic tool development
- » The team evaluated existing methods or developed new tests to improve the capability to detect 15 endemic and 10 exotic graft-transmissible citrus pathogens, including the causal agents of Huanglongbing (HLB), the biggest threat to citrus
- The improved diagnostic tools developed and validated through the project were adopted by the National Citrus Repository program (funded through project CT15005, described on the following page) and the Auscitrus propagation scheme to test plant material prior to supply to industry
- » New viroid detections were made using the improved diagnostic tools
- » The project team participated in surveillance for citrus emergency plant pests in production, urban or high risk areas, and surveillance samples were tested for the causal agents of HLB and citrus variegated chlorosis to provide evidence of absence
- » Project team members delivered messages about the threat of graft-transmissible diseases to Australian citrus growers via extension publications and presentations at industry forums, including biosecurity workshops in major citrus growing regions.

Protecting Australia's citrus genetic material (CT15005)

NOW COMPLETE

Key research provider: Auscitrus

Access to healthy planting material is essential for the Australian citrus industry, with supply of disease-free, true-to-type propagation material of key importance. While diseases such as Huanglongbing and citrus variegated chlorosis remain exotic to Australia, there are a number of graft-transmissible viruses and viroids in Australia that can cause stunting, yield loss and even death in some scion and rootstock combinations.

With this in mind, this investment – running from 2015 and concluding early in 2018/19 – continued to fund the long-term National Citrus Repository (NCR) program for publicly owned citrus varieties. It supported the maintenance and disease testing of foundation trees in the NCR, as well as the disease testing of new Australian citrus selections entering the repository system.

The NCR is an important part of an integrated biosecurity system designed to protect the health and economic viability of the Australian citrus industry. From foundation tree budwood, Auscitrus creates daughter trees and multiplies large numbers of buds for industry. New varieties can enter the program if no known diseases are detected after pathogen testing and elimination.

By the end of this investment, there were 122 publicly owned citrus clones housed by the NCR, from Australia and overseas sources.

Maximising the biosecurity of the Australian citrus industry budwood facility (CT17003)

NEW IN 2017/18

Key research provider: Auscitrus

Contracted in January 2018, this investment is tasked with increasing the preparedness of the Australian citrus industry for any future incursion of the Asiatic citrus psyllid and the accompanying disease Huanglongbing (HLB). It will allow a structure to be built to house Auscitrus-grown citrus budwood plants under insect-proof conditions — ensuring a source of HLB-free budwood for Australian citrus nurseries.

While supply trees have been traditionally maintained in open-orchard conditions, with routine testing, an increased prevalence of HLB in neighbouring countries and greater pressure on Australia's quarantine borders mean the risk of an HLB outbreak has grown. The availability of HLB-free budwood is seen as a critical factor in mitigating the spread of any future incursion of HLB, and in redeveloping orchards potentially affected as a result of this.

Australian Citrus Post-harvest Science Program (CT15010)

Key research provider: NSW Department of Primary Industries

The development of rots and decay (such as green mould) after harvest can be a serious problem for growers and packers, particularly in fruit for export markets where produce is stored and transported over many weeks. The ongoing Australian Citrus Post-harvest Science Program is working to develop best practices to manage current fungicides and sanitisers to control decay, and to ensure Australian citrus remains clean and green with ultra-low residues. The project is continuing to review and extend the best ways to control post-harvest decay and improve the quality of Australian citrus. Information is supplied to growers through face-to-face interactions across key growing regions as well as through industry articles in *Australian Citrus News*, with regular updates and articles provided in the publication.

Building a genetic foundation for Australia's citrus future through targeted breeding (CT15017)

Key research provider: The Queensland Department of Agriculture and Fisheries

Beginning in late 2016, this ongoing project supports a diverse and comprehensive breeding program to develop improved, quality varieties for the Australian citrus industry. A range of breeding technologies and germplasm work are employed in this integrated program, which is on track to deliver varieties that are excellent in both appearance and taste.

Australian Citrus Quality Standards – stage 3 (CT15013)

Key research provider: Citrus Australia

Established in 2011 and now in its third stage, the Australian Citrus Quality Standards program has a focus on improving and maintaining the eating quality of Australian citrus – ensuring fruit consistently meets or exceeds consumer expectations. The overarching goal is to increase consumption and ensure the price of Australian citrus is maximised.

Some of the key work in the project includes...

- » Capturing and disseminating information of the maturity levels and quality of fruit for sale in the wholesale market, to inform marketing decisions
- » Developing and implementing procedures to improve quality (which has included development of the maximum granulation standard for Imperial mandarins to help restore consumer confidence)
- » Increasing knowledge in the supply chain to achieve greater adoption of quality improvement practices
- » Developing a standard operating procedure for start of harvest that reduces the likelihood of immature fruit entering the supply chain.

Australian citrus industry innovation and market development program (CT15012)

Key research provider: Citrus Australia

Beginning in 2016, this investment supports a range of personnel to help develop a globally competitive and well-informed citrus industry that can reliably supply product that satisfies market requirements. These personnel include...

- » A market development manager (MDM), to help facilitate reliable supply, overcome market challenges and identify new opportunities. Activities of the MDM include the coordination of exporter groups, trade missions, crop forecasting and biosecurity work.
- » A market access manager (MAM), to help the industry overcome barriers to trade. Activities of the MAM include updating the industry's export strategy plan and export manual, working with stakeholders to improve phytosanitary protocols, and advising on Free Trade Agreements.
- » A market information manager (MIM) to engage all valuechain participants to capture and disseminate timely information on supply, market conditions and shipping movements

Agrichemical residue monitoring program for Australian citrus exports – stage 2 (CT15016)

Key research provider: Citrus Australia

Beginning in 2016, this project works to ensure exporters have effective residue risk-management strategies in place and continues, improves and expands on the Australian Citrus Pesticide Residue Monitoring Program (ACPRMP), which commenced in 2011. The ACPRMP involves the testing of Australian citrus for a range of chemical residues and potential contaminants, to ensure that citrus exporters meet regulatory requirements in domestic and international markets. The program is a collaborative arrangement between industry and the Australian Government, and citrus exporters and packing houses not already participating are encouraged to contact David Daniels at Citrus Australia, at david.daniels@citrusaustralia.com.au.

Generation of residue, efficacy and crop safety data for pesticide applications in horticulture crops 2017 (ST16006)

Key research provider: Eurofins Agrisearch

The generation of pesticide residue, efficacy and crop safety data is required to support label registration and minor use permit applications made to the Australian Pesticides and Veterinary Medicines Authority which, when approved, provide access to safe and effective chemicals for the management of pests, weeds and diseases. This investment is responsible for producing the data required to support a range of registration and permit applications across a host of horticulture industries, including citrus.

Citrus industry minor use program (CT16000)

Key research provider: Hort Innovation

Through this project, levy funds and Australian Government contributions are used to submit renewals and applications for new minor use permits for the citrus industry, as required. These submissions are prepared and submitted to the Australian Pesticides and Veterinary Medicines Authority.

For more on minor use permits, including a list of permits, see p10.

All current permits for the industry remain searchable at **portal.apvma.gov.au/permits**, while permit updates are also circulated in Hort Innovation's *Growing Innovation* e-newsletter, which levy-paying members receive monthly. Not a member? Sign up to the Hort Innovation membership program for free at **www.horticulture.com.au/membership**.

Development of phenology models and a timing guide for the management of Californian red scale in Australian citrus (CT15008)

Key research provider: NSW Department of Primary Industries

Aphytis wasps and petroleum spray oils are used in the control of Californian red scale in Australian citrus crops – but they are only or mostly effective at certain life stages of the pest, and so timing is everything. This ongoing project is developing degreeday-based phenology models to predict the timing of peak abundance of vulnerable life stages of Californian red scale to better guide Aphytis releases and oil applications.







Development of national strategies to manage citrus gall wasp (CT15006)

Key research provider: NSW Department of Primary Industries

Citrus gall wasp is a major and widespread pest in citrus. Established in 2015, this project is developing national management strategies for the wasp based on...

- » Enhanced biological control
- » Better timing of control actions, through investigation of the relationship between weather and the wasp's development
- » Improved use of oil and other potential repellents
- » Identification of new insecticide options compatible with integrated pest management approaches.

Citrus industry communications (CT15009)

Key research provider: Currie Communications

This ongoing investment delivers effective and timely communications to ensure Australian citrus growers and other industry stakeholders are kept up-to-date with the latest R&D and marketing activities, and other industry news and information. Among its key goals are to support decision-making within citrus businesses and to facilitate the uptake of new research and technologies, to ultimately strengthen the profitability and sustainability of the industry.

A number of regular communication channels are produced and maintained by this project, including but not limited to...

- » The quarterly national magazine, Australian Citrus News
- » Fortnightly Citrus eNews e-newsletters, now incorporating information previously included in separate Season Update newsletters
- » The industry website, www.citrusaustralia.com.au.

The project also produces industry media releases as required, maintains a photography database, and develops grower case studies for peer-to-peer learning. Its work is supported by the investment *Citrus Australia Limited – communication support on CT15009* (CT15015), which provides funding to Citrus Australia to facilitate work with the communication program's external service provider.

Citrus Technical Forums (CT16700)

Key research provider: Citrus Australia

This investment is responsible for the planning and delivery of the industry's biennial Citrus Technical Forums, which are a chance for growers and other industry participants to come together to learn about the latest technological developments and updates on current R&D projects. The events combine presentations, workshops and field trips.

SITplus: Developing and optimising production of a male-only, temperature-sensitive lethal, strain of Qfly, B. tryoni (MT13059)

HORT FRONTIERS

Key research provider: South Australian Research and Development Institute (SARDI)

This project is developing a 'temperature-sensitive lethal, male-selecting' strain of Queensland fruit fly (Qfly). To put simply, the research will allow for male-only, sterile fruit flies to be bred in large numbers. It is one of the key projects in the broader strategic co-investment SITplus initiative that's tackling the issue of Qfly. The male flies are to ultimately be released in growing regions of south-eastern Australian that are affected by Qfly. They will come to outnumber the wild male population in these areas and by mating with wild females — and limiting the opportunity for wild males to do so — they are intended to lead to the collapse of wild Qfly populations. The citrus industry is one of several involved in the project which, as a SITplus initiative, is now part of the Hort Frontiers Fruit Fly Fund.

Full details of completed research can be found in project final reports which, when finalised, are available to order at **www.horticulture.com.au/final-report-order-form**. Final reports are free to Australian horticulture levy payers, registered Hort Innovation members and industry representative bodies.

Minor use permits

Why minor use permits?

While the use of pesticides and other chemicals in the horticulture industry is being modified through the increasing uptake of integrated pest management approaches, there remains a need for the strategic use of specific chemicals.

Chemical companies submit use patterns for product label registrations to the Australian Pesticides and Veterinary Medicines Authority (APVMA), and the citrus industry is generally provided with a number of label registrations because of its 'major' crop status in this area. However, there are instances where chemical companies consider the market size too small to generate adequate commercial returns, based on the R&D investment required. This is where minor use permits come into play. The APVMA's national permit system adds some flexibility to the approval process and provides a legal framework that can allow access to products for minor use purposes.

Permits in 2017/18

During the 2017/18 financial year, successful renewals for PER14932 and PER14772 were prepared by Hort Innovation and submitted to the APVMA, facilitated through the *Citrus industry minor use program* (CT16000) and with PER14772 supported by data generated through the AgVet-grant-supported project *Generation of residue data for pesticide minor use permit applications in horticulture crops 2015/16* (ST15027).

Meanwhile, permits PER82831 and PER81925 were also renewed during 2017/18, with the applications submitted through the industry minor use program in the previous financial year.

Further permits were also issued during the year – including some related to citrus canker – with these applications made outside of the Hort Innovation Citrus Fund.

All permit details can be found in the table that follows.

Current permits

Below is a list of minor use permits for the citrus industry, current as of September 1, 2018.

PERMIT ID	DESCRIPTION (CHEMICAL/CROP/PEST OR USE)	ORIGINAL DATE OF ISSUE	EXPIRY DATE	PERMIT HOLDER
PER10706	Triclopyr (Garlon) / Citrus plants and other host plants of citrus canker / Citrus canker	01-Jul-08	31-Mar-20	Biosecurity Queensland
PER13059 version 2	Abamectin + clofentezine + amitraz / Citrus trees / Citrus red mite	01-Oct-11	30-Sep-20	NSW Department of Primary Industries (DPI)
PER13158 version 9	Dimethoate / Specified citrus and tropical fruit commodities (inedible peel, post-harvest) / Various fruit fly species	06-Oct-11	06-Mar-19	Hort Innovation
PER14772 version 3	Iprodione (Rovral) / Mandarins (susceptible varieties) and tangelos / Emperor brown spot	01-Oct-15	30-Jun-23	Citrus Australia
PER13859	Dimethoate / Orchard clean-up — fruit fly host crops following harvest / Fruit fly	09-Feb-15	31-Jul-24	Growcom
PER14932 version 2	Abamectin / Citrus / Queensland fruit fly	17-Feb-15	31-Jan-23	Citrus Australia



PERMIT ID	DESCRIPTION (CHEMICAL/CROP/PEST OR USE)	ORIGINAL DATE OF ISSUE	EXPIRY DATE	PERMIT HOLDER
PER82831 version 4	Clothianidin (Samurai) / Grapefruit, lemons, limes and mandarins / Citrus gall wasp (NB: Sumitomo registration pending)	04-Aug-16	31-Mar-19	Citrus Australia
PER81925 version 4	Clothianidin (Samurai) / Oranges / Citrus gall wasp (NB: Sumitomo registration pending)	04-Aug-16	31-Mar-19	Citrus Australia
PER82043	Captan / Mandarins / Emperor brown spot	05-Oct-16	31-Jul-22	Citrus Australia
PER86822	Chlorine / Citrus — whole fruit of the family Rutaceae / Citrus canker	16-Jul-18	31-Jul-20	Department of Agriculture and Water Resources (DAWR)
PER86730	Sodium ortho-phenylphenate tetrahydrate (Preventol On Fungicide) / Citrus fruit / Citrus canker	03-Jul-18	31-Jul-23	Department of Primary Industries and Regional Development, Western Australia
PER86582	Copper present as tribasic copper sulphate / Citrus / Citrus canker	01-Jun-18	31-May-20	Department of Agriculture and Food, Western Australia (DAF WA)
PER86477	Copper present as tribasic copper sulphate / Treatment of citrus trees / Citrus canker	18-May-18	31-May-20	DAF WA
PER13915	Benzalkonium chloride / Equipment and vehicles / Citrus canker and guava rust complex	01-Apr-13	31-May-20	NSW DPI
PER82367	Thiamethoxam (Actara) / Citrus and cotton / Brown marmorated stink bug and yellow spotted stink bug	22-Mar-18	31-Mar-23	DAWR

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.

Minor use permit updates are circulated in Hort Innovation's e-newsletter, *Growing Innovation*, which levy-paying members receive monthly. Not a member? Sign up for free at www.horticulture.com.au/membership.

Marketing report

Hort Innovation is responsible for investing the orange marketing levy into a range of activities to drive awareness and positioning, under the Hort Innovation Citrus Fund – with a particular focus on export markets.

During 2017/18, new domestic and export marketing strategies were developed in conjunction with industry to support the long-term and strategic focus of citrus marketing, and to ensure marketing levy investments continue to reflect industry priorities across the range of markets Australian citrus growers supply.

Program activities during the year had a keen focus on promotion and exposure in international markets, with specific attention being given to Japan, the Philippines, China and Vietnam.

A more sophisticated approach to Japan

Marketing efforts at the tail end of 2016/17 and through 2017/18 continued to engage more deeply with the Japanese market. The major aim was to consolidate the positioning of Australian citrus and deepen relationships in-market by engaging Japanese trade customers — showcasing premium fruit to hotels, restaurants, wholesalers and media.

Activity in 2017/18 included a collaboration with Meat and Livestock Australia to host a food service promotion at the Prince Hotels 'Australia Fair' in Tokyo and Osaka from September 9 to October 31, 2017. Citrus was a main focus during the event's opening ceremony and was included in e-newsletters to the Prince Hotel database.

Into 2018, the new 2018-2020 Citrus Marketing Strategy began with two trade seminars in Japan, launching the start of the Australian navel orange season. Ben Cant, Chairman of Citrus Australia, and the industry's Market Access Manager, David Daniels, presented key insights on the Australian citrus industry at the events, which were held on May 24 in Osaka and May 25 in Tokyo.

Joseph Ling, who is Managing Director of AGRIFresh, and Greg Noble, Director and Manager of RJN Nominees, both represented Australian citrus growers and answered questions from the 230 Japanese retailers and importers who attended.

For the first time, there was also sampling of Australian orange juice at the seminars during the events' networking sessions.











International retailer activity

Activity at the start of the 2017/18 financial year saw successful in-store campaigns run in China, Malaysia, Vietnam, the Philippines, Thailand and Japan.

In China, three key retailers had sampling in 15 stores, supported by banner ads on the websites of major 'e-tailer' Fruitday, as well as mobile app advertisements and a WeChat promotion. E-commerce start-up Miss Fresh also conducted an online promotion that produced a repurchase rate of more than 10 per cent from online sales.

In Malaysia, sampling was conducted in four major stores. There was also media engagement with key influencers and celebrity ambassadors — with samples and gift baskets provided to encourage the creation of Australian citrus content. Overall, the results of this activity reached some 100,000 people across social media channels Facebook and Instagram.

In Vietnam, five retailers took part in sampling activities, with citrus samples and engagement with consumers taking place in a total of 117 stores.

The Philippines saw a successful social media campaign with a reach of nine million people. This supported the 117 stores of three retailer chains that conducted sampling sessions and cooking demonstrations in-store.

In Thailand, 43 stores undertook sampling with positive responses from Tops, Makro, Tesco, Max Value and UFM retailers.

In Japan, media sampling and communications activities resulted in significant online coverage, reaching some 553 million people. Retail partners also had 66 stores conducting sampling days, producing a 242 per cent increase in sales of Australian citrus compared to non-promotional periods.

Looking ahead, 'Taste Australia' is Hort Innovation's exportmarket initiative, encompassing trade show attendance, in-store promotions and engagement with buyers, media and influencers to spread the message about Australia's quality produce. It replaced the 'Now in Season' export marketing initiative in late 2017. In early 2018/19, Taste Australia was set to promote Australian navel oranges in Japan, China, Vietnam and the Philippines with content development, retail and social media activities.

Financial statement

Financial operating statement 2017/18

	R&D (\$)	MARKETING (\$)	TOTAL (\$)
	2017/18 July – June	2017/18 July – June	2017/18 July – June
OPENING BALANCE	550,518	1,001,602	1,552,121
Levies from growers (net of collection costs)	2,396,813	363,559	2,760,373
Australian Government money	1,816,703	_	1,816,703
Other income*	27,039	32,022	59,061
TOTAL INCOME	4,240,555	395,582	4,636,138
Project funding	3,036,972	228,783	3,265,755
Consultation with and advice from growers	38,447	9,327	47,775
Service delivery – Base	127,083	9,839	136,922
Service delivery – Shared	192,440	14,900	207,340
Service delivery – Fund specific	238,461	18,273	256,734
TOTAL EXPENDITURE	3,633,406	281,123	3,914,529
Levy contribution to across-industry activity	77,663	-	77,663
CLOSING BALANCE	1,080,004	1,116,061	2,196,066
Levy collection costs	82,271	22,972	105,243

At the end of 2016/17, the industry's pro rata share of levy funds were committed to strategic reserves (\$273,353 for R&D and \$82,510 for marketing), and so have been deducted from the 2017/18 opening balance.

Service delivery costs explained

Base service delivery (flat rate) = keeping the lights on

This figure contributes to the standard fixed costs that are incurred with the running of the business (for example, costs relating to rent, utility bills, equipment). These costs are calculated on a monthly basis and are based on actual program expenditure.

Shared service delivery (flat rate) = related to program delivery

Shared costs are related to program delivery and include costs that are incurred in supporting activities relating to R&D and marketing programs that are not attributable to any one levy industry (for example, costs relating to procurement and information technology activities). These costs are calculated on a monthly basis and are based on actual program expenditure.

Fund specific service delivery (flat rate for 2017/18) =

direct servicing costs

These are the actual costs for activities and services that are directly incurred in the administration of levy program expenditure, and which are identifiable and attributable to a specific levy investment fund (for example, costs around direct relationship, marketing and fund management, and logistical costs around industry advisory meetings and activities). From 2018/19 these costs will be charged at cost on a monthly basis.

For more information explaining the costs in the financial summary, visit www.bit.ly/2x7ERLC.

^{*} Interest, royalties

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