



Lychee Fund

Annual Report 2019/20

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

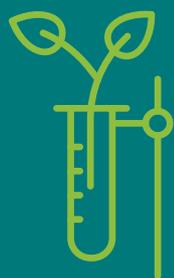
About the year

An intense and unpredictable year, 2019/20 certainly dealt challenges for the world, for Australian horticulture, and for Hort Innovation. There was ongoing drought, a devastating bushfire season, intense floods, the biosecurity threat of fall armyworm and, of course, the global and ongoing COVID-19 pandemic.

We encourage you to download a copy of the overarching Hort Innovation Annual Report 2019/20 at www.horticulture.com.au/annual-report-portal to better understand Hort Innovation’s responses to these events, and how the company was able to change its plans and priorities to best serve the sector.

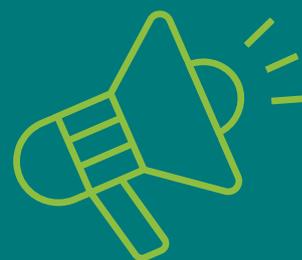
Through it all, though, activity in the Hort Innovation Lychee Fund remained strong. While some activities inevitably changed under COVID-19, it was still a solid year of investment. There was some \$104,000 invested in R&D for the industry, plus \$24,000 in marketing. Read on for an overview of what was delivered.

2019/20 Lychee Fund snapshot



\$104,000

invested in R&D



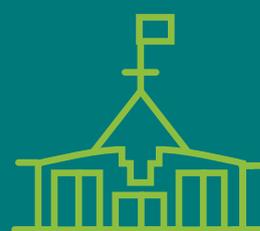
\$24,000

invested in marketing



12

active R&D
investments



\$141,000

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

Did you know?



\$34.4M

The lychee industry has doubled in value, growing from \$16.8 million in 2013/14 to \$34.4 million in 2018/19



18%

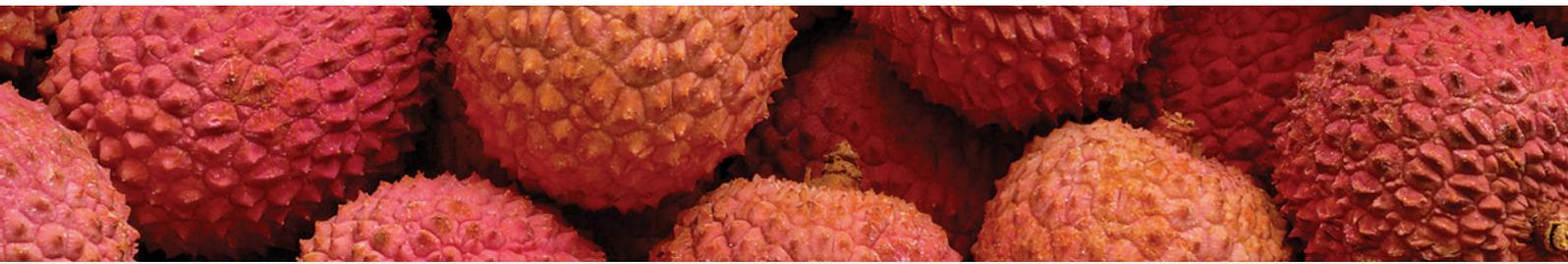
Eighteen per cent of lychees grown in Australia are exported to international markets



99%

Nearly all of Australia's lychee production – 99 per cent – takes place in Queensland

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 2018/19 edition was released in early 2020 and, for the first time, 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:

- ✓ **An updated Lychee Field Guide**, to help growers identify key pests, diseases and more – download it at www.bit.ly/lychee-guide
- ✓ **A guide to maximising pollination in lychee orchards**, available at www.bit.ly/lychee-pollination*
- ✓ **Information and data to assist through COVID-19**, including the new *Hort Innovation Insights* podcast (www.horticulture.com.au/webinars) and regular consumer attitude and behaviour information (www.horticulture.com.au/impact-monitor)*
- ✓ **Preparation support for fall armyworm**, including emergency minor use permits and an educational podcast series, www.bit.ly/armyworm-podcast*
- ✓ **The industry communications program**, delivering the *Living Lychee* journal and industry website, www.australianlychee.com.au
- ✓ **The lychee Harvest to Home dashboard** providing regular household purchase data and insight reporting, at www.harvesttohome.net.au
- ✓ **A domestic marketing campaign** and, launched during COVID-19, **The Good Mood Food** across-horticulture campaign* (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 2019/20 for more*

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

Making investments in 2019/20

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



* Encapsulating extension and international trade

To learn more about funding specific to the Hort Innovation Lychee Fund, visit www.horticulture.com.au/lychee. 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 reserves.

Investment planning and performance

During 2019/20, Hort Innovation continued to track investment expenditure against the Lychee Strategic Investment Plan, while looking towards new developments in 2021. Access an at-a-glance copy of the current investment plan at www.bit.ly/lychee-plan.

A performance analysis is coming

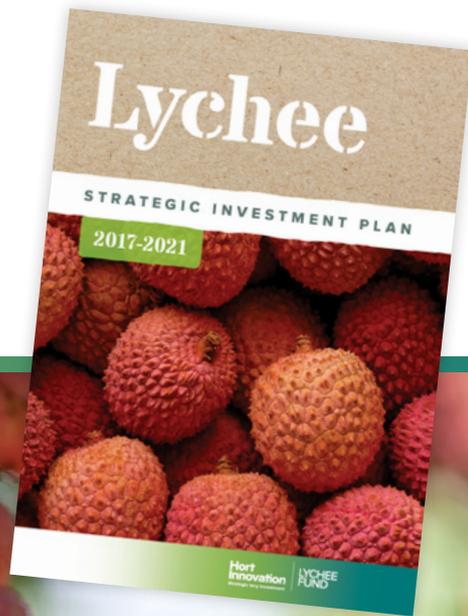
The industry's investment plan outlines key goals and outcomes for levy investment. With the plan due for renewal in 2021, Hort Innovation is undertaking a performance analysis to see how the industry has progressed against the current plan's ambitions. This will also help guide ongoing priorities for investment. Look for information to be published at www.horticulture.com.au/lychee in 2021.

See how your levy investments align to the industry's current plan

You can see how investment expenditure in the Hort Innovation Lychee Fund aligns to the industry's current strategic investment plan with the interactive analysis information available from www.bit.ly/lychee-investment. The analysis shows the allocation of funding against each of the lychee plan's outcomes, and gives an indication of the projects that are aligned to each outcome.

New ways of obtaining advice and setting priorities

In 2020/21, Hort Innovation will be implementing new ways of obtaining advice and setting priorities for industry investments. Renewed industry investment plans, plus new yearly (or as needed) program plans and new ways of consulting more broadly will mean more efficient investment and better outcomes for industry. Watch this space.



R&D project list 2019/20

NEW INVESTMENTS IN 2019/20

LY19001	Lychee pest and diseases field guide*
MT18006	Biosecurity plan for the lychee, papaya and passionfruit industries
MT19008	Strategic Agrichemical Review Process (SARP) updates

* This flagged project was both new and completed in 2019/20

ONGOING INVESTMENTS IN 2019/20

LY16000	Lychee industry minor use program
LY16005	Australian lychee industry communications program
MT17015	Consumer behavioural and retail data for fresh produce
MT18011	Ex-post impact assessment^

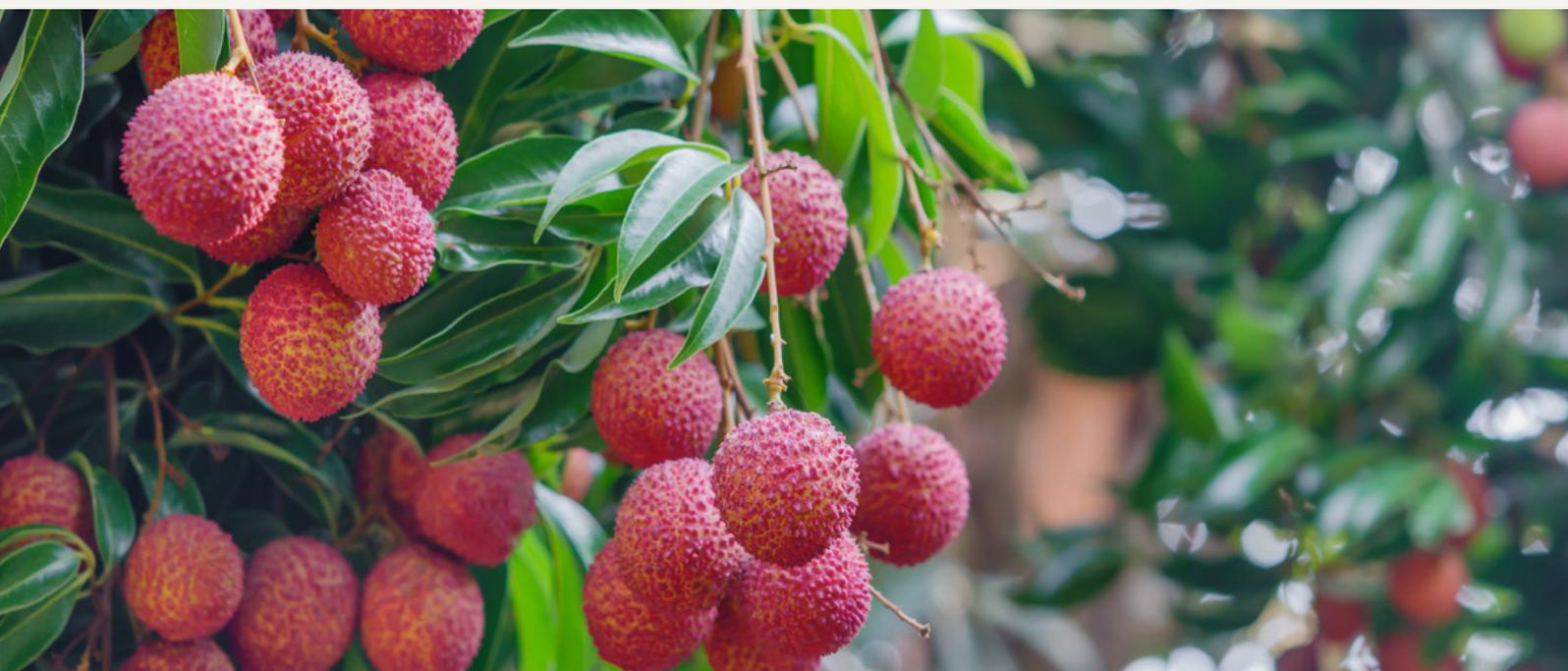
ONGOING INVESTMENTS IN 2019/20 (continued)

ST16006	Generation of residue, efficacy and crop safety data for pesticide applications in horticulture crops 2017
ST17000	Generation of data for pesticide applications in horticulture crops 2018
ST18001	Generation of data for pesticide applications in horticulture crops

^ This multi-industry project was a key monitoring and evaluation investment during 2019/20 – we encourage you to find the full details at www.horticulture.com.au/mt18011

INVESTMENTS COMPLETED IN 2019/20

LY18000	Mite and insect disinfestation of lychee fruit using high pressure water sprays
ST16008	AgVet collaborative forum



R&D report

Take a closer look at some of the key investments in the Hort Innovation Lychee Fund during 2019/20. You can also visit www.horticulture.com.au/lychee 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.

Lychee pest and disease field guide (LY19001)

NEW IN 2019/20 & NOW COMPLETE

Key research provider: The Queensland Department of Agriculture and Fisheries

In 2019/20, this project updated the *Lychee pest and disease handbook*, a resource that assists lychee growers and industry stakeholders to effectively monitor and manage pests and diseases in their orchards. The guide is available for download at www.bit.ly/lychee-guide and was also distributed to lychee growers in hard copy through the Australian Lychee Growers Association.

The previous version was last updated in 2008, so the new version includes the addition of new pests and diseases of concern as well as information on major exotic pests and diseases not currently present in Australia.

In developing the guide, the project team reviewed the current status and priority of present pests and diseases; identified exotic lychee pests and disease threats; identified the priority pests and diseases relevant to specific production regions; and determined appropriate control measures for each pest.

Biosecurity plan for the lychee, papaya and passionfruit industries (MT18006)

NEW IN 2019/20

Key research provider: Plant Health Australia

Beginning in 2020, this investment is reviewing and combining biosecurity plans for the lychee, papaya and passionfruit industries. The result will be a top-level document that identifies high-priority endemic and exotic pests, diseases and weeds, along with the risk mitigation activities required to reduce

their biosecurity threat, and surveillance and diagnostic activities. It will provide a strategic framework for industry and government to work together to improve preparedness for and response to these potential threats.

The lychee industry's current biosecurity plan is available from Plant Health Australia at www.planthealthaustralia.com.au/lychees.

Mite and insect disinfestation of lychee fruit using high pressure water sprays (LY18000)

NOW COMPLETED

Key research provider: The Queensland Department of Agriculture and Fisheries

Earlier levy-funded project ***Treatment for mites on lychee fruit after irradiation for improved market access (LY16002)*** looked at using oil treatments, and water sprays in combination with oil treatments, for removing mite and other insect pests on lychee fruit. This is of particular importance for quarantine export markets (and especially those where irradiation protocols are used), where fruit needs to be free of surface pests including mites.

This subsequent work looked at optimising the efficacy of high-pressure water application to remove surface pests prior to packing, irradiation and export. This approach has the potential to allow higher throughput on the packing line.

This project demonstrated the efficacy of high-pressure sprays as a disinfestation tool for lychee surface pests through a number of trials. Grower confidence in the results following trials in 2018/19 saw two additional growers install high-pressure wash systems for the 2019/20 season, with industry interest in this method continuing to grow.

Australian lychee industry communications program (LY16005)

Key research provider: Fruit Tree Media

Ongoing through 2019/20, this project ensures Australian lychee growers remain up to date with the latest R&D, marketing and other relevant information and issues related to the industry.

Project activities during the year continued to include the production of the *Living Lychee* journal and its distribution to the Australian Lychee Growers Association mailing list, plus the updating and maintenance of the industry website with practical content, news and other key information for growers. You can access the project's resources at www.australianlychee.com.au.

Consumer behavioural and retail data for fresh produce (MT17015)

Key research provider: Nielsen

This multi-industry investment provides regular consumer behaviour data and insight reporting to a range of industries, through the Harvest to Home platform (www.harvesttohome.net.au).

The platform has a dedicated dashboard for lychees, making data and reporting easily accessible for industry participants. The 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 are available to support strategic activities, as well as Hort Innovation Lychee Fund marketing plans.

Lychee industry minor use program (LY16000)

Key research provider: Hort Innovation

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

For more on minor use permits, including a list of permits, see [p9](#).

All current minor use permits for the industry are searchable at portal.apvma.gov.au/permits. Permit updates are also circulated in Hort Innovation's *Growing Innovation* e-newsletter, which you can sign up for at www.horticulture.com.au/sign-up.



Data generation investments (ST16006, ST17000 and ST18001)

Key research providers: Eurofins and Peracto

The generation of pesticide residue, efficacy and crop safety data is required to support label registration and minor use permit applications made to APVMA which, when approved, provide access to safe and effective chemicals for the management of pests, weeds and diseases.

These multi-industry projects are generating the data needed to support a range of label registrations and minor use permit applications and renewals across a variety of horticulture crops, including lychee. They include **Generation of residue, efficacy and crop safety data for pesticide applications in horticulture crops 2017 (ST16006)**, **Generation of data for pesticide applications in horticulture crops 2018 (ST17000)** and **Generation of data for pesticide applications in horticulture crops (ST18001)**, and all are supported by grant funding through the Australian Government's Access to Industry Priority Uses of AgVet Chemicals program.

Strategic Agrichemical Review Process (SARP) updates (MT19008)

NEW IN 2019/20

Key research provider: AGK Services

This short investment is facilitating a 2020 Strategic Agrichemical Review Process (SARP) for several horticulture industries, including the lychee industry. Providing an updated view of current priorities and gaps regarding pest, disease and weed control, the completed lychee SARP report will assist in directing ongoing efforts to ensure the availability of and access to effective chemical controls. This may relate to pursuing chemical registrations with agrichemical companies, or minor use permits.

Minor use permits

The Hort Innovation Lychee 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 www.bit.ly/minor-use-lychee.

Permits in 2019/20

During the 2019/20 financial year, successful renewals for PER87717, PER14743 and PER80366 (issued as PER88401) were prepared by Hort Innovation and submitted to the APVMA, facilitated through the **Lychee industry minor use program (LY16000)**.

Meanwhile, a successful renewal for PER82879 (issued as PER88197) was also approved during 2019/20, with the application submitted through the industry minor use program in the previous financial year.

Separately, 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, Hort Innovation was involved in securing emergency permits for crop protection chemicals, with all horticulture industries having at least one effective option available to them by the end of 2019/20. For the lychee industry, PER89241 and PER89870 were obtained for this reason.

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 lychee industry, current as of 21 September 2020.

PERMIT ID	DESCRIPTION	DATE ISSUED	EXPIRY DATE	PERMIT HOLDER
PER12450 Version 6	Trichlorfon / Specified fruit crops / Fruit fly	06-Oct-11	31-Jan-21	Growcom
PER80374 Version 2	Beta-cyfluthrin (Bulldock) / Custard apple, lychee, mango, persimmon / Various insect pests	01-Oct-15	31-Aug-22	Australian Lychee Growers' Association (ALGA)
PER80367	Pyraclostrobin (Cabrio) / Lychee / Anthracnose or pepper Spot	12-May-15	31-Oct-25	ALGA
PER87164 Version 2	Dimethoate / Specified citrus and tropical and sub-tropical inedible peel fruit commodities – post-harvest dip or flood spray / Various fruit fly species	01-Mar-19	31-Mar-24	Hort Innovation
PER13659 Version 2	Mancozeb / Lychee / Pepper spot	01-Oct-12	30-Sep-22	ALGA C/Hort Innovation
PER13660 Version 2	Copper hydroxide and cuprous oxide / Lychee / Lychee pepper spot	14-Aug-12	30-Jun-22	ALGA C/Hort Innovation
PER14099 Version 2	Methidathion / Lychee / Mealybug, nutborer, planthopper, scale / Leafhoppers and fruit spotting bug <i>Please note: Production registration has been cancelled and there will be a phase-out period until 4 February 2021</i>	01-Jul-13	04-Feb-21	ALGA C/ Hort Innovation

Continued >>

PERMIT ID	DESCRIPTION	DATE ISSUED	EXPIRY DATE	PERMIT HOLDER
PER14508 Version 2	Sulphur (Granusulf 800WG) / Lychee / Erinose mite and white louse scale	21-Mar-14	30-Nov-21	ALGA C/Hort Innovation
PER14507 Version 2	Petroleum oil / Lychee / Green shield scale, soft green scale and soft scales	21-Mar-14	30-Nov-21	ALGA C/Hort Innovation
PER14743 Version 3	Trichlorfon / Custard apple, lychee, mango and persimmon / Flatid planthopper, flower eating caterpillar, looper and yellow peach moth; Suppression only: fruit-spotting bug, banana spotting bug, green vegetable bug and lychee stink bug	01-Jun-14	30-Jun-25	Hort Innovation
PER13859	Dimethoate / Orchard clean-up – fruit fly host crops following harvest / Fruit fly	09-Feb-15	31-Jul-24	Growcom
PER80369	Prochloraz (Octave) / Lychee / Anthracnose or pepper spot	17-Mar-15	31-Oct-25	ALGA
PER88401 (Replaces PER80366)	Buprofezin (Applaud) / Lychee / Scale insects, mealybug and flatid planthoppers	23-Jan-20	31-Jan-25	Hort Innovation
PER88197	Cyprodinil + Fludioxonil (Switch Fungicide) / Lychee / Lychee pepper spot, anthracnose	05-Nov-19	30-Nov-24	Hort Innovation
PER85397	Sulfoxaflor (Transform) / Lychee, mango, papaya, and passionfruit (field grown) / Fruit-spotting bug and banana-spotting bug	17-Apr-18	30-Apr-23	Hort Innovation
PER81753 Version 2	Ethephon (Ethrel) / Lychee / Seasonal vegetative flushes	05-Apr-16	31-Jan-24	Hort Innovation
PER89241	Spinetoram / Tropical inedible peel / Fall armyworm	06-Mar-20	31-Mar-23	Hort Innovation
PER89870	Spinosad (Entrust Organic) / Various including tropical and sub-tropical fruit crops (inedible peel) / Fall armyworm	21-Jul-20	31-Jul-23	Hort Innovation

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.

Marketing report

Hort Innovation is responsible for investing the lychee marketing levy into a range of activities to drive awareness and consumption of the fruit, under the Hort Innovation Lychee Fund. Read on for a snapshot of activities and results from the 2019/20 marketing program.

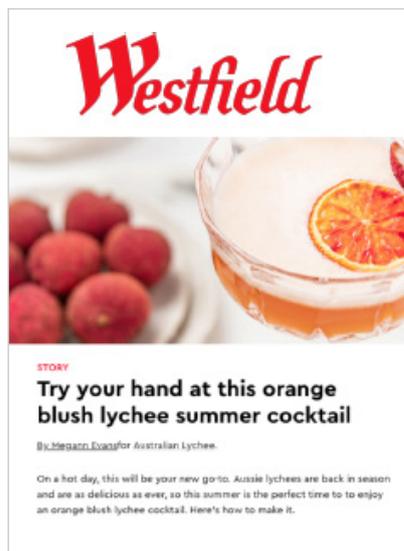
Public relations

Outreach to Australian media was used to help drive awareness, education and inspiration through high-reaching coverage. This involved the distribution of a media release promoting the new lychee season and a 'tip sheet' on how to select, peel and eat the fruit, as well as inspirational recipes featuring lychees. This material highlighted how simple it is to entertain guests with the inclusion of lychees and the nutritional benefits of the fruit.

A social media influencer was also engaged by the program to create engaging recipe content and images that were distributed to both print and online media.

The success of a PR campaign was measured by the number of publications that ran articles featuring lychees, their print circulation and online reach, plus how often a key message was mentioned. In every case the 'entertaining' message was mentioned

in the articles published by the media. Over the course of the campaign, 11 pieces of coverage were secured across traditional and social media, with a total reach of 8.5 million people, well exceeding the target of 1.5 million and surpassing last year's results by six million.





Social media

Social media activity is a great tool for a small budget, being a cost-efficient way to reach the public. The Aussie Lychee Facebook page (www.facebook.com/aussielychees) and Instagram (@aussielychees) featured curated content that aimed to inspire the target audience to put lychees on their shopping lists.

Twenty posts across Facebook and Instagram during the season were used to target key audiences with beautiful and delicious content inspiring usage occasions. The content used was primarily re-purposed material created by the influencer for the PR campaign, but also included material from past campaigns, and posts from other sources that featured lychees.

Over the course of the campaign, lychee social media content was seen 820,000 times by lychee fans and target consumers of Australian lychees.



Sampling

The main objective of in-store sampling was to increase the number of households that purchase lychees by converting shoppers to buyers while in the supermarket. In 21 Woolworths stores across Sydney metro areas, shoppers were given a choice of trying lychees by themselves or paired with yoghurt. Each sampling session lasted three hours and during this activity, 2,500 samples were given out. The average conversion rate (measured as sales uplift) of the sampling was 11 per cent, with the best performing store being in the Sydney suburb of Gordon with a 30 per cent sales conversion.



THE GOOD MOOD FOOD

THE GOOD MOOD FOOD

In 2019/20, Hort Innovation created The Good Mood Food campaign to deliver an immediate and enduring behaviour-change message to motivate more Australians to eat more fruit, vegetables and nuts.

With the central message that these Aussie horticulture products are natural mood boosters, the campaign was developed to support the sector through the impacts of recent challenges including bushfires, drought, floods and of course COVID-19 – the effects of which continue to be felt in consumer spending and purchasing behaviour.

Initially running between May and November 2020, The Good Mood Food has been seen across the country on TV; in newspapers; on radio and music streaming services; online (including on YouTube and TV catch-up services); on social media; and via retail partnerships and advertising screens near supermarkets.

In July, 56 per cent of surveyed consumers said The Good Mood Food had positively influenced their shopping habits, and by the end of campaign's run, 98 per cent of all Australians were expected to be reached.

Learn more at www.horticulture.com.au/the-good-mood-food.

Financial statement

Financial operating statement 2019/20

	R&D (\$)	MARKETING (\$)	TOTAL (\$)
	2019/20 July – June	2019/20 July – June	2019/20 July – June
OPENING BALANCE	145,816	12,544	158,361
Levies from growers (net of collection costs)	97,135	44,073	141,208
Australian Government money	71,942	–	71,942
Other income*	1,650	(56)	1,594
TOTAL INCOME	170,727	44,018	214,744
Project funding	103,847	24,008	127,855
Consultation with and advice from growers	326	140	466
Service delivery – base	5,437	1,816	7,254
Service delivery – shared	7,807	2,608	10,415
Service delivery – fund specific	22,000	18,000	40,000
Service delivery – minor use	4,465	–	4,465
TOTAL EXPENDITURE	143,883	46,572	190,455
Levy contribution to across-industry activity	–	–	–
CLOSING BALANCE	172,660	9,990	182,650
Levy collection costs	5,082	2,389	7,471

* Interest, royalties

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