

What happened in the Apple and Pear Fund last year?

Annual Report 2020/21



About Hort Innovation and the Apple and Pear Fund

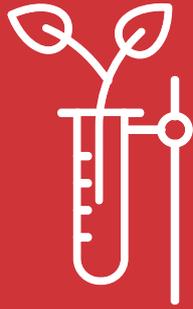
Hort Innovation is the grower-owned, not-for-profit research and development corporation for Australia's horticulture sector. We work closely with industry to invest the apple and pear R&D and marketing levies, together with Australian Government contributions, into key initiatives for growers, through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

Throughout another challenging year for the horticulture sector, activity in the Apple and Pear 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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\$2.84M

invested in R&D



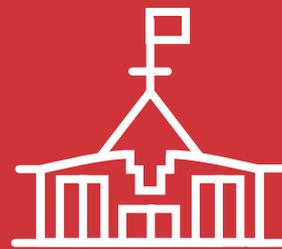
\$4.8M

invested in marketing



36

active R&D investments



\$4.98M

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



\$652M

Apples had a production
value of \$652 million
in 2019/20



\$128M

Pears had a production
value of \$128 million
in 2019/20



88%

Apples and pears are grown
across Australia, however some
88 per cent of our pears and
45 per cent of our apples are
grown in Victoria

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



A new iteration of the Productivity, Irrigation, Pests and Soils program

for both apple and pear growers, find out more at www.horticulture.com.au/apple-and-pear



The industry communications program, delivering the *Australian Fruitgrower* magazine, *Industry Juice* emails and more via www.apal.org.au, as well as the internationally renowned **Future Orchards extension program** (www.apal.org.au/future-orchards)



Harvest to Home dashboards for apples and pears providing regular household purchase data and insight reporting, at www.harvesttohome.net.au



Multi-pronged domestic marketing campaigns for both Aussie Apples and Australian Pears, 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*

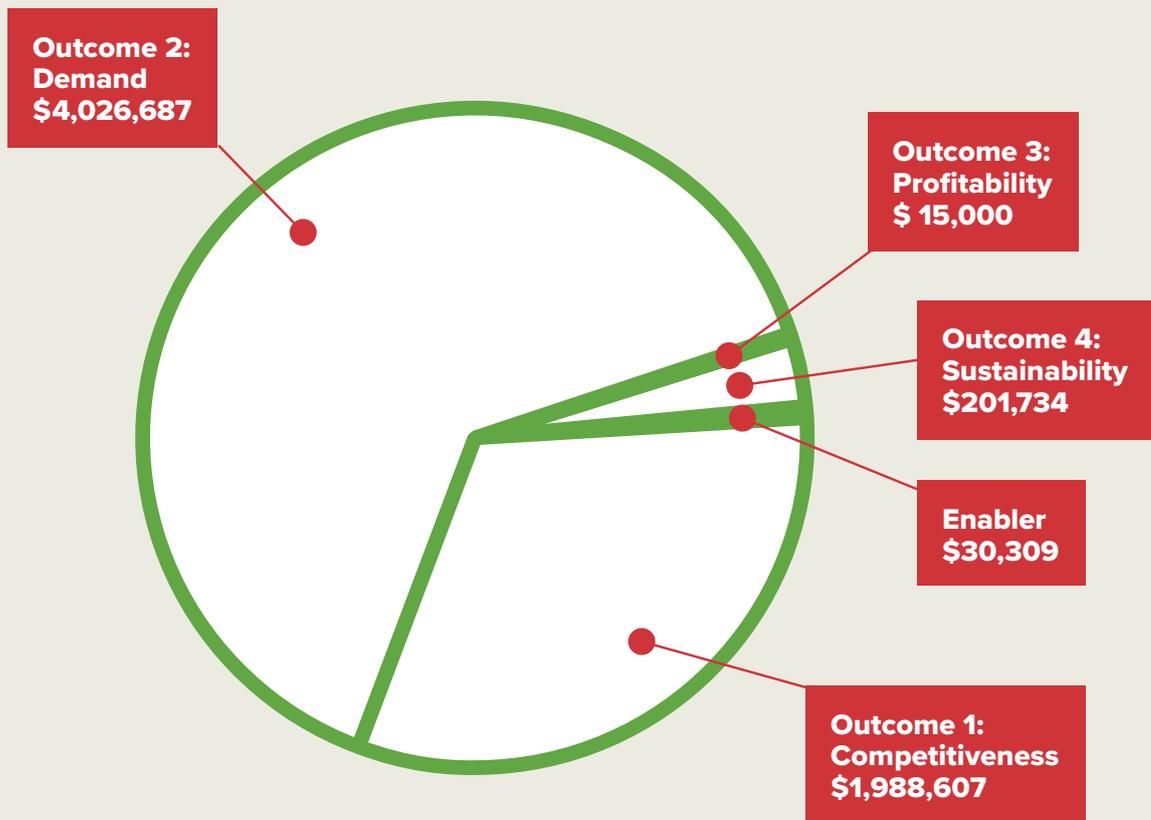


Projects supported by grants secured by Hort Innovation, ranging from cross-sector Rural R&D for Profit initiatives to horticulture-specific work to aid in access to crop protection products – see the Hort Innovation Annual Report 2020/21 for more*

You can visit www.horticulture.com.au/apple-and-pear 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 Apple and Pear 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 Apple and Pear Fund are guided by the apple and pear 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 Apple and Pear 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: Competitiveness

Industry profitability and global competitiveness is improved by reducing the average cost per carton

Project title and code	2020/21 investment	Status	More information
Improved tree and fruit nutrition for the Australian apple industry (AP14023)	\$180,000	Completed	hortinn.com/ap14023
Australian apple and pear industry innovation and adoption program (AP15004)	\$258,912	Completed	hortinn.com/ap15004-and-ap15005
Delivery of apple and pear Future Orchards extension program (AP15005)	\$114,841	Completed	hortinn.com/ap15004-and-ap15005
Physiological, metabolic and molecular basis of biennial bearing in apple – Australian component of AP15002 (AP15013)	\$44,176	Completed	hortinn.com/ap15002-and-ap15013
Apple and pear industry minor use permit program (AP16001)	\$350	Ongoing	hortinn.com/ap16001
Developing agri-tech solutions for the Australian apple industry (AP16005)	\$216,000	Ongoing	hortinn.com/ap16005
An integrated pest, disease and weed management program for the Australian apple and pear industry (AP16007)	\$114,074	Completed	hortinn.com/ap16007
National apple and pear industry communications program (AP18000)	\$244,840	Ongoing	hortinn.com/ap18000
Strengthening cultural and biological management of pests and diseases in apple and pear orchards (AP19002)	\$80,000	Ongoing	hortinn.com/ap19002
Advancing sustainable and technology driven apple orchard production systems (AP19003)	\$131,667	Ongoing	hortinn.com/ap19003
Technology review for fruit traceability at every stage of the apple and pear fruit production and supply chain (AP19004)	\$101,000	Ongoing	hortinn.com/ap19004
Developing smarter and sustainable pear orchards to maximise fruit quality, yield and labour efficiency (AP19005)	\$139,377	Ongoing	hortinn.com/ap19005

Continued

Investments

Outcome 1: Competitiveness (continued)

Project title and code	2020/21 investment	Status	More information
Improved Australian apple and pear orchards soil health and plant nutrition (AP19006)	\$188,620	Ongoing	hortinn.com/ap19006
Independent program coordination for the apple and pear Productivity, Irrigation, Pests and Soils program (PIPS3) (AP19007)	\$48,700	Ongoing	hortinn.com/ap19007
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)	\$20,574	Ongoing	hortinn.com/mt17006
Parasitoids for the management of fruit flies in Australia (MT19003)	\$14,047	Ongoing	hortinn.com/mt19003
Xylella insect vectors (ST19018)	\$20,000	Ongoing	hortinn.com/st19018

Outcome 2: Demand

Growing demand in both domestic and export markets has increased the value of the marketable harvest.

Marketing activities during 2020/21 contributed to demand-related outcomes in the SIP. You can read more about the apple and pear marketing campaigns on p11.

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)	\$26,500	Ongoing	hortinn.com/am17001
Apple and pear export readiness and market access (AP17002)	\$414,188	Ongoing	hortinn.com/ap17002
Australian apple consumer and shopper research (AP19000)	\$11,100	Completed	hortinn.com/ap19000
Essential market access data packages (MT14052)	\$86,566	Ongoing	hortinn.com/mt14052
Horticulture trade data (MT19005)	\$5,821	Ongoing	hortinn.com/mt19005
Across horticulture support for export MRL compliance (MT19006)	\$14,349	Ongoing	hortinn.com/mt19006



Outcome 3: Profitability

The value of the average bin has risen, resulting in improved industry profitability

Project title and code	2020/21 investment	Status	More information
Enhanced National Bee Pest Surveillance Program (MT16005)	\$15,000	Ongoing	hortinn.com/mt16005

Outcome 4: Sustainability

A cultural shift across industry has better equipped growers for long-term sustainability

Project title and code	2020/21 investment	Status	More information
Apple and pear crop estimate (AP16002)	\$62,234	Completed	hortinn.com/ap16002
Masterclass in Horticultural Business (LP15001)	\$10,000	Completed	hortinn.com/lp15001
Advancing women's leadership across the Australian horticultural sector (LP16000)	\$9,701	Ongoing	hortinn.com/lp16000
Consumer behavioural and retail data for fresh produce (MT17015)	\$119,799	Ongoing	hortinn.com/mt17015-apple-pear

Financial operating statement

Apple and Pear Fund Financial operating statement 2020/21

	R&D (\$)	Apple Marketing (\$)	Pear Marketing (\$)	Total (\$)
	2020/21 July – June	2020/21 July – June	2020/21 July – June	2020/21 July – June
OPENING BALANCE	(367,939)	3,380,999	1,919,201	4,932,261
Levies from growers (net of collection costs)	1,938,113	2,062,035	977,014	4,977,162
Australian Government money	2,067,399	–	–	2,067,399
Other income*	3,722	10,687	8,171	22,580
TOTAL INCOME	4,009,234	2,072,722	985,185	7,067,141
Project funding	2,840,294	3,415,988	1,382,158	7,638,440
Consultation with and advice from growers	2,466	3,589	584	6,639
Service delivery	458,892	636,861	257,521	1,353,274
TOTAL EXPENDITURE	3,301,652	4,056,438	1,640,263	8,998,353
Levy contribution to across-industry activity	–	–	–	–
CLOSING BALANCE	339,643	1,397,283	1,264,123	3,001,049
Levy collection costs	46,677	27,593	29,362	103,632

* 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 Apple and Pear Fund's focus over the next five years?



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

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

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

What projects will the fund be investing in next year?

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

Improving orchard productivity through new technology and better biological pest and disease management

Hort Innovation supports the coordination and integration of several projects, which together make up the 'PIPS3' program for the apple and pear industry (the third iteration of the Productivity, Irrigation, Pests and Soils program)

The challenge

The apple and pear industry needs smarter, more sustainable orchards to maximise fruit quality, yield and labour efficiency with more effective biological pest and disease management.



Jason Shields, manager of Plunkett Orchards.
Photo credit: APAL.

Meet Jason

The PIPS3 program's *Advancing Sustainable and Technology Driven Apple orchard production systems* (AP19003) project, has established its 'Crop Load' experiment in a Ruby Pink orchard block at Plunkett Orchard in Victoria's Goulburn Valley. Physiological and sensing tool studies are underway there to validate a rapid orchard assessment tool, using a ground-based mobile sensing platform equipped with LiDAR and optical cameras, known as Green Atlas Cartographer™, to determine crop load for optimum fruit size.

Jason Shields is the manager of Plunkett Orchards, and he's been impressed with what he's seen first-hand from the technology so far and has high hopes for the near future.

"Initially we trialed it (GreenAtlas Cartographer™) in the pilot stages, a couple of seasons ago," he says. "We were really happy with it. The mapping was really impressive. It was able to clearly show the uniformity (or more to the point, the lack of uniformity) within a block over flowering."

This automated technology provides an accurate determination of crop yield and consistency within a block, which will improve the practical operations of the orchard.

Continued



The project team is also using data from Jason and other growers to develop tools which will quickly let growers know what crop load to leave on their trees to achieve the desired outcome. It's also helping to determine relationships between fruit position and light exposure on colour development, sunburn damage, fruit quality and floral initiation.

"I think there's so much potential in this, it's really exciting. But to effectively use new technology, robots, etc, we need to have a consistent canopy, a consistent yield throughout the block, and this technology is helping us to do that."

The approach

Hort Innovation is investing in new apple and pear technology and biological control methods for the industry via PIPS3, which is building on the many successes of the previous PIPS programs.

The program works collaboratively with commercial orchards to trial the latest high-tech and sustainable systems, including better biological disease management, soil health and nutrition irrigation, automation, and labour efficiency.

For more information on the PIPS3 program, visit www.horticulture.com.au/apple-and-pear

“

“The mapping was really impressive. It was able to clearly show the uniformity (or more to the point, the lack of uniformity) within a block over flowering.”

Jason Shields, manager of Plunkett Orchards

The impact

This whole-of-system approach is enabling researchers to meet the challenges identified by Australian apple and pear growers – better management of orchards in variable climates, customer expectations, effective resource management and improved sustainability using biological solutions.

This project places Australian apple and pear growers at the forefront of the industry, continually improving orchard production systems, maximising quality and yield, while increasing nutrient use efficiency under increasingly variable climates.

Aussies rediscover apples as the healthy lockdown snack

Hort Innovation invests in marketing activities designed to grow consumer demand for apples in the Australian market.

The opportunity

With lockdowns across the country during 2020/21, stay-at-home snacking was at record levels. Australians were looking for a tasty treat that could stop their hunger and satisfy their tastebuds, without stacking on the COVID kilos. Thankfully, quality Australian apples were just what the doctor ordered.



The approach

The millions of Australians in lockdown and working from home were keen for a healthy snack alternative. The challenge was to ensure that alternative was apples. With interest in apples diminishing, Australians needed to be reconnected with the fruit, assured of its quality, and its many nutritional traits.

To do this, a fully integrated campaign was created, targeting the main household grocery buyers aged 25 to 54. Through TV, digital videos (including YouTube and on-demand), outdoor and retail advertising, PR and social media, Australians were reassured that Australian apples are the healthy snack of choice.

The campaign positioned Aussie Apples as the revitalising natural snack that gives your mind and body a boost to get back on track. It urged them to 'Hit Refresh' every time they needed a snack and to 'Hit Refresh' on their bad lockdown snacking habits.

To achieve this, 15 and 30 second TV ads were created to engage the target audience of pragmatic foodies and healthy snackers, running on Seven and Ten from April to July 2021.

Continued



Apple and Pear Strategic Marketing Panel



The Apple and Pear Strategic Marketing Panel (SMP) was established in 2019 by Hort Innovation, in partnership with APAL, to help drive demand for Australian apples and pears through innovative, effective and efficient marketing.

The role of the SMP is to help guide the development and implementation of a mid to long-term marketing strategy and provide advice on annual investment plans that contribute to delivering growth in both domestic consumption and international export of the fruits.

The SMP consists of one Hort Innovation executive, two APAL executives, three grower representatives, and two marketing experts experienced in the 'fast-moving consumer goods' (FMCG) space.

To assure consumers that apples were their preferred healthy snack of choice, the 2020 Snack Report was undertaken by the marketing team to understand current snacking habits and push Aussies are to 'Hit Refresh' on their lockdown munching.

The Survey led to great PR opportunities, with TV presenter Beau Ryan leading the charge, embarking on a Snack Swap Challenge, swapping an unhealthy snack with an Aussie Apple. The Challenge was covered by news.com.au, Nine, Seven and Ten News, Daily Telegraph, Women's Health and many more, as well as huge reach and engagement across social media.

On social a competition was launched asking Aussies to tag someone who needed to 'Hit Refresh' for the chance to win a \$500 voucher, resulting in more than 200 tags across Facebook and Instagram.

Shoppers were also targeted in store, right before a purchase, with advertising in major retailers and display screens near key shopping locations.

Marketing case study



The outcome

A three-month multi-channel campaign cemented the apple's place as the go-to snack for health-conscious Australians. The creative idea to 'Hit Refresh' on consumer eating habit was leveraged with excellent PR, a strong media presence, celebrity endorsement and high social media engagement. Some of the highlights included:

- 1.79 million 25 to 54-year-old grocery buyers reached at least once via the TV campaign with the average metro viewer seeing it almost seven times
- More than two million people reached via digital video ads
- 59 campaign media mentions, with a combined potential audience of 47 million
- Four million people reached across Facebook and Instagram

“

“Hit Refresh’ for Aussie Apples demonstrates the value proposition of apples for consumers. It takes on the snack food market with a natural and uplifting alternative to traditional packaged competitors – making apples top of mind when selecting a healthy choice snack. It also highlights that there’s an apple favourite variety for everyone, bringing appeal and conversation back to the apple aisle.”

Nardia Stacy, Executive Manager, Pomewest

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

Project details

These marketing activities are strategic levy investments in the Hort Innovation Apple and Pear Fund

Reminding Australians that good things come in pears

Hort Innovation invests in marketing activities designed to grow consumer demand for pears in the Australian market.

The opportunity

With Australia's appetite for pears declining in recent years, the main goal for 2020/21 was to rekindle the nation's love affair with the delicious fruit by capitalising on its winning combo of great taste and health benefits.



The approach

With just 60 per cent of Australians eating a pear throughout the year, marketing activity focused on reconnecting consumers with the product, turning pears from a 'forgotten' fruit to an Australian favourite. Research showed that Aussies often underestimated how good pears are for their health, so the *Good Things Come in Pears* campaign was created to remind them of this.

The new campaign positioned pears as a healthy, tasty snack that's surprisingly good for you. It was supported across digital channels, via an 'always-on' social media campaign, including influencers, plus outdoor advertising.

Some of the nutritionists and celebrities were enlisted for the PR campaign, targeting 25–54-year-old healthy foodies and health-conscious, heavy fruit buyers. Key facts from the consumer survey were pitched to media, with Nutritionist Dr Joanna McMillan and Masterchef judge, Melissa Leong, enlisted as spokespeople for the campaign.

Far from being "forgotten" the pear and its many health benefits were visible everywhere, from roadside ads to shopping centre displays. With catch-up digital viewers growing 30 per cent year on year, three 15 second ads were also created to run on the medium, providing huge exposure and cut-through.

To target shoppers in store, ads also ran across various retailer media channels, including retail magazines, digital front of store screens, and across retailer online shopping websites.

Further afield, the Taste Australia retail program promoted the quality and benefits of Australian pears to overseas markets, with 8,500 tonnes of pears exported in the 12 months to May 2021.

Hort Innovation also supported pear promotion in Western Canada, where Australian Pears recorded a 20 per cent increase in trade for the 2021 season and was the leading supplier of southern season pears into British Columbia in the first five months of 2021, according to the Canadian government.



The outcome

Tasked with returning pears to prominence, the *Good Things Come In Pears* campaign ensured that Aussies of all ages reengaged with the fruit and were once again reminded of its many taste and health benefits. Across multiple platforms, this campaign reached millions of all ages, particularly the young and health-conscious. Some key highlights include:

- 1 million completed ad views across 7plus and 10play, reaching 5,130,000 people
- 520,000 YouTube views as of the end of June 2021 and growing
- 27.6 million people reached by PR from April to June 2021, including 14 media mentions
- 1.1 million people reached via Australian Pears Facebook and Instagram pages

“

“The ‘Good things come in Pears’ campaign for Australian Pears played on the pear/pair word association to highlight the obvious: that pears are great, particularly for gut health, but they’re also fun to eat. The creative also assists customers via media channels to understand the ripening process associated with pears and how to avoid bruising for that perfect pear experience.”

Nardia Stacy, Executive Manager, Pomewest

Project details

These marketing activities are strategic levy investments in the Hort Innovation Apple and Pear Fund

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

Minor use permits

The Hort Innovation Apple and Pear 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/apple-and-pear-minor-use.

Permits in 2020/21

During the 2020/21 financial year, a successful renewal for PER12864 was prepared by Hort Innovation and submitted to the APVMA, facilitated through the *Apple and pear industry minor use program* (AP16001).

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

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



Minor use permits

Current permits

Below is a list of minor use permits for the apple and pear industry, current as of 23 August 2021.

Permit ID	Description	Date issued	Expiry date	Permit holder
PER12590 Version 4	Delegate (spinetoram) / Pomefruit and stonefruit / Fruit fly (Suppression only)	06-Oct-11	31-May-24	Hort Innovation
PER12864 Version 3	Metiram (Polyram DF Fungicide) / Apples / Alternaria leaf blotch and alternaria fruit spot	18-Apr-13	30-Jun-26	Hort Innovation
PER14562 Version 2	Thiacloprid (Calypso) / Pome fruit and stone fruit / Mediterranean fruit fly (WA only)	13-Dec-13	30-Sep-23	Hort Innovation
PER13859	Dimethoate / Orchard cleanup – fruit fly host crops following harvest / Fruit fly	09-Feb-15	31-Jul-24	Growcom
PER89241	Spinetoram / Various including pome fruit / Fall armyworm	06-Mar-20	31-Mar-23	Hort Innovation
PER89259	Chlorantraniliprole (Coragen, Altacor and Altacor Hort Insecticide) / Pome fruit / Fall armyworm	06-Mar-20	31-Mar-23	Hort Innovation
PER89278	Indoxacarb (Avatar Insecticide) / Apples, nashi pear, pears / Fall armyworm (<i>Spodoptera frugiperda</i>)	13-Mar-20	31-Mar-23	Hort Innovation
PER89293	Methomyl / Apple and pear / Fall armyworm (<i>Spodoptera frugiperda</i>)	10-Apr-20	30-Apr-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 Apple and Pear Fund

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