Pistachio Fund

2017/18 ANNUAL REPORT
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The projects in this report have been funded by Horticulture Innovation Australia Limited using sources including the pistachio levy, Australian Government contributions and, in some instances, co-contributions from a variety of sources.

Content

Welcome ..................................................................................................................................................... 1
Making levy investments ............................................................................................................................. 2
R&D project list 2017/18 .............................................................................................................................. 3
R&D report ................................................................................................................................................ 4
Minor use permits .................................................................................................................................... 6
Financial statement ................................................................................................................................... 9
At Hort Innovation it’s our job to work with industry to invest the voluntary pistachio levy and Australian Government contributions into initiatives to help growers be as productive and profitable as possible – and 2017/18 was a fantastic year of growing better, together.

This year was the first year that the pistachio voluntary levy was invested into R&D projects through the Hort Innovation Pistachio Fund. And with close to $70,000 invested and the establishment of six new projects, I’m happy to be able to share with you all the key insights in this Hort Innovation Pistachio Fund Annual Report.

You’ll find a top-level list of all R&D investments from the year on p3, and can explore research projects involving the voluntary levy in more detail from p4. Just some of the highlights include work to help growers access and implement best practice, new knowledge and current technologies, plus research to deliver important consumer insights and support access to safe and effective chemicals.

On a personal note, thank you for welcoming me as your new Relationship Manager. I know that during 2017/18 my predecessor, Corrine Jasper, enjoyed getting to connect with you about everything going on in the Pistachio 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 dumi.mhlanga@horticulture.com.au or on 0447 091 186 if there’s something you’d like to ask or discuss around voluntary levy investments.

I also encourage you to explore the easy ways you can stay close to all of the good things your voluntary 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 Pistachio Fund. The latest edition is always available from the Pistachio Fund page at www.horticulture.com.au/pistachio, while members have Hortlink sent straight to their inboxes.

» Engage with your industry knowledge-transfer program. The project Technology transfer for pistachio growers (PS17002) is dedicated to bringing the latest information and advice to growers, including news, outcomes and resources related to voluntary levy investments. The work is funded through the Hort Innovation Pistachio Fund and delivered by the Pistachio Growers’ Association, with more info available on p4.

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

Dumi Mhlanga
Pistachio Relationship Manager, Hort Innovation
(e) dumi.mhlanga@horticulture.com.au (m) 0447 091 186
Making levy investments

Discover how the voluntary pistachio levy and Australian Government contributions are invested through the Hort Innovation Pistachio 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 initiatives they want to see.


Ideas can be for your specific industry — to be funded by the voluntary industry levy and 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](http://www.hortfrontiers.com.au) for more.

How are levy decisions made?

Let’s talk ‘SIPs’ and ‘SIAPs’!

The pistachio industry has its own Strategic Investment Plan (SIP), which is a document that outlines key industry priorities for investment.

This SIP is used like a ‘roadmap’ by the pistachio Strategic Investment Advisory Panel (SIAP).

The SIAP is 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 to provide advice to Hort Innovation on potential voluntary levy investments.


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](http://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?


Hortlink also provides updates on ongoing and recently completed investments.

The industry knowledge-transfer program, run through the investment [Technology transfer for pistachio growers](http://www.horticulture.com.au/pistachio) (PS17002), also provides regular information on activity funded by the pistachio voluntary levy. See p4 for more.
## R&D project list 2017/18

### NEW INVESTMENTS IN 2017/18

<table>
<thead>
<tr>
<th>Project Code</th>
<th>Project Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PS16000</td>
<td>Understanding and managing insects on pistachio orchards</td>
</tr>
<tr>
<td>PS16002</td>
<td>Pathogens and other factors contributing to dark staining on pistachio shells</td>
</tr>
<tr>
<td>PS17002</td>
<td>Technology transfer for pistachio growers</td>
</tr>
<tr>
<td>PS17003</td>
<td>Pistachio productivity improvement program</td>
</tr>
<tr>
<td>MT17012</td>
<td>Generation of residue data for permit applications</td>
</tr>
<tr>
<td>MT17015</td>
<td>Consumer behavioural and retail data for fresh produce</td>
</tr>
</tbody>
</table>

### INVESTMENTS COMPLETED IN 2017/18*

<table>
<thead>
<tr>
<th>Project Code</th>
<th>Project Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PS13000</td>
<td>Trialling dry hulling of raw pistachios to improve pistachio processing</td>
</tr>
<tr>
<td>PS13003</td>
<td>Technology Transfer to Pistachio growers utilising regional grower groups</td>
</tr>
<tr>
<td>MT13061</td>
<td>Understanding the purchase behaviour of fresh produce consumers</td>
</tr>
</tbody>
</table>

* These completed investments were established prior to the voluntary pistachio levy and the official Hort Innovation Pistachio Fund, being funded using voluntary contributions and Australian Government funding under the original Horticulture Australia Limited (HAL).

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](http://www.horticulture.com.au/across-horticulture) for financial documents and information on this program.
R&D report

Take a closer look at the voluntary levy investments begun in the Hort Innovation Pistachio Fund during 2017/18. Any resources from these and other voluntary-levy-funded projects – such as fact sheets, guides and more – are published on your grower page at www.horticulture.com.au/pistachio as they become available.

Technology transfer for pistachio growers (PS17002)

Key research provider: The Pistachio Growers’ Association

Beginning in March 2018, this three-year investment is all about bringing the latest in Australian and international research, best practice and technical information to the nation’s pistachio growers. It picks up the work of Technology transfer to pistachio growers utilising regional grower groups (PS13003), an earlier initiative funded by industry contributions through the then Horticulture Australia Limited.

Specific activities of the project include but aren’t limited to...

» Maintaining and expanding the pistachio industry’s regional ‘Tech Groups’

» Facilitating field days and farm walks throughout each year in the country’s major pistachio growing regions, with involvement of Australian and international experts

» Compiling technical information from Australia and overseas into resources for growers, including presentations, ‘Seasonal Notes’ to be distributed quarterly, e-bulletins and more

» Updating of the industry website with new information

» Workshops for new entrants to the industry.

The collective aim of this work is to assist pistachio producers in maintaining high profitability and in maximising yield, size, appearance and taste of Australian pistachio nuts.

Pistachio productivity improvement program (PS17003)

Key research provider: The Pistachio Growers’ Association

Established at the tail-end of 2017/8 and getting underway in 2018/19, this investment will continue to support improvements in the cultivation of pistachios and the uptake of new and changing production practices through research, development and extension activities. It will support the work of a pistachio researcher who will, in conjunction with other research associates, undertake ongoing field research that builds on the outcomes of earlier project Maintaining and expanding the technical development of the Australian pistachio industry (PS14000), which was funded by industry contributions through the then Horticulture Australia Limited.

Goals of the work will include...

» Improving yields, through a better understanding of orchard management issues

» Benchmarking and reporting on quality and yield information to growers

» Assisting in disseminating information to growers, and in the adoption of R&D

» Supporting an increase in pistachio plantings

» Exploring new development areas for pistachio research

» Responding to any changing environmental and seasonal issues that may arise.

At the time of writing this annual report, a pistachio researcher was set to be appointed – look out for further information in industry channels as it becomes available. It is expected that areas of research for the investment and potential sub-projects will include research into blanks, boron application, chill hours, the use of the modified central leader tree structure and more.

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/pistachio.
Pathogens and other factors contributing to dark staining on pistachio shells (PS16002)

Key research provider: AgXtra

Established in September 2017, this investment is delving into dark staining of pistachio shells and nuts – an issue that leaves produce unmarketable and that has been tentatively linked to fungal pathogens Fusarium and Alternaria in preliminary studies.

Its work involves field and laboratory studies to evaluate the occurrence of dark staining and to provide information on causal agents associated with the problem. It is also looking at factors that could influence fungal infection, such as insect damage or environmental conditions. The project will ultimately develop a monitoring tool for growers to use in evaluating the risk of fungal disease, and assist in the future development of management strategies.

Understanding and managing insects on pistachio orchards (PS16000)

Key research provider: Ag Dynamics

Contracted in September 2017, this two-year investment is responsible for increasing knowledge about pest and beneficial species of insects and mites in Australian pistachio orchards. In its course, it will help the industry better understand the pests that currently pose a risk to pistachio production, or that have the potential to move into orchards. The work will also help the industry prioritise future research in pest management.

Consumer behavioural and retail data for fresh produce (MT17015)

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 pistachio 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.

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.

Generation of residue data for permit applications 2017 (MT17012)

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.

Beginning in December 2017, this multi-industry investment is responsible for generating pesticide residue and crop safety data to support applications and renewals for a range of permits. For the pistachio industry, it is conducting a residue trial for fungicide prochloraz, used in the control of anthracnose, panicle and shoot blight. This work was being undertaken during the course of the 2018 season.
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) – however the pistachio industry is generally provided with limited label registrations because of its ‘minor’ crop status in this area (meaning the chemical companies can 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.
Current permits

Below is a list of minor use permits for the pistachio industry, current as of September 3, 2018.

<table>
<thead>
<tr>
<th>PERMIT ID</th>
<th>DESCRIPTION (CHEMICAL/CROP/PEST OR USE)</th>
<th>ORIGINAL DATE OF ISSUE</th>
<th>EXPIRY DATE</th>
<th>PERMIT HOLDER</th>
</tr>
</thead>
<tbody>
<tr>
<td>PER80806</td>
<td>Iprodione / Pistachio / Botrytis rot and Alternaria leaf spot</td>
<td>11-Oct-15</td>
<td>31-Aug-20</td>
<td>Pistachio Growers’ Association Incorporated (PGAI)</td>
</tr>
<tr>
<td>PER80764 version 2</td>
<td>Prochloraz / Pistachio / Anthracnose and panicle and shoot blight</td>
<td>11-Oct-15</td>
<td>30-Nov-20</td>
<td>PGAI</td>
</tr>
<tr>
<td>PER80760</td>
<td>Chlorothalonil (Bravo Fungicide) / Pistachio / Anthracnose and panicle and shoot blight</td>
<td>10-Sep-15</td>
<td>31-Aug-20</td>
<td>PGAI C/AgAware</td>
</tr>
<tr>
<td>PER13642 version 2</td>
<td>Chlorpyrifos and Malidson / Tree nuts / Australian plague locust</td>
<td>01-Sep-12</td>
<td>30-Jun-25</td>
<td>Australian Nut Industry Council C/Hort Innovation</td>
</tr>
<tr>
<td>PER13954</td>
<td>Copper / Pistachio / Suppression of Botryosphaeria, Alternaria alternata and bacterial dieback</td>
<td>01-Apr-13</td>
<td>31-Mar-22</td>
<td>PGAI C/AgAware</td>
</tr>
<tr>
<td>PER80703</td>
<td>Cyprodinil + fludioxonil (Switch) / Pistachio / Anthracnose and panicle and shoot blight</td>
<td>1-Dec-15</td>
<td>30-Oct-20</td>
<td>PGAI C/AgAware</td>
</tr>
<tr>
<td>PER80700</td>
<td>Mancozeb / Pistachio / Anthracnose and panicle and shoot blight</td>
<td>1-Dec-15</td>
<td>31-Oct-20</td>
<td>PGAI C/AgAware</td>
</tr>
<tr>
<td>PER14627</td>
<td>Petroleum oil / Pistachio / Soft scales</td>
<td>28-Feb-14</td>
<td>31-Mar-19</td>
<td>PGAI C/AgAware</td>
</tr>
</tbody>
</table>

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.
Connect with Hort Innovation!
Become a member at www.horticulture.com.au/membership
Financial statement

Financial operating statement 2017/18

<table>
<thead>
<tr>
<th></th>
<th>R&amp;D ($)</th>
<th>TOTAL ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OPENING BALANCE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Levies from growers (net of collection costs)</td>
<td>39,628</td>
<td>39,628</td>
</tr>
<tr>
<td>Australian Government money</td>
<td>41,439</td>
<td>41,439</td>
</tr>
<tr>
<td>Other income*</td>
<td>2,077</td>
<td>2,077</td>
</tr>
<tr>
<td><strong>TOTAL INCOME</strong></td>
<td>83,144</td>
<td>83,144</td>
</tr>
<tr>
<td>Project funding</td>
<td>69,935</td>
<td>69,935</td>
</tr>
<tr>
<td>Consultation with and advice from growers</td>
<td>262</td>
<td>262</td>
</tr>
<tr>
<td>Service delivery – Base</td>
<td>2,901</td>
<td>2,901</td>
</tr>
<tr>
<td>Service delivery – Shared</td>
<td>4,393</td>
<td>4,393</td>
</tr>
<tr>
<td>Service delivery – Fund specific</td>
<td>5,387</td>
<td>5,387</td>
</tr>
<tr>
<td><strong>TOTAL EXPENDITURE</strong></td>
<td>82,878</td>
<td>82,878</td>
</tr>
<tr>
<td>Levy contribution to across-industry activity</td>
<td>1,773</td>
<td>1,773</td>
</tr>
<tr>
<td><strong>CLOSING BALANCE</strong></td>
<td>32,605</td>
<td>32,605</td>
</tr>
<tr>
<td>Levy collection costs</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

* Interest, royalties

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.