

# Passionfruit

## Strategic Investment Plan

2022-2026



# CONTENTS

<b>Executive summary</b>	<b>3</b>
<b>The passionfruit Strategic Investment Plan</b>	<b>5</b>
Financial estimates	6
<b>SECTION ONE: Passionfruit industry outcomes</b>	<b>7</b>
Industry outcomes	7
<b>SECTION TWO: Passionfruit industry strategies</b>	<b>9</b>
Strategies to address industry investment priorities	9
<b>SECTION THREE: Passionfruit SIP monitoring and evaluation</b>	<b>11</b>
Passionfruit SIP Monitoring and Evaluation Framework	11
Reporting framework	13
<b>SECTION FOUR: Collaboration and cross-industry investment</b>	<b>14</b>
Strategic science and research focus	14
Annual investment planning	15
Investment opportunities through Hort Frontiers	15
Australian-grown Horticulture Sustainability Framework	16
<b>SECTION FIVE: Hort Innovation</b>	<b>18</b>
Strategic Investment Plan logic	18
Aligning to the Hort Innovation investment priorities	18
<b>SECTION SIX: Appendices</b>	<b>19</b>
<b>APPENDIX 1:</b> Industry context	19
<b>APPENDIX 2:</b> Passionfruit industry situation analysis	21
<b>APPENDIX 3:</b> People consulted	22
<b>APPENDIX 4:</b> Reference material	22
<b>APPENDIX 5:</b> List of acronyms	23

## DISCLAIMER:

Horticulture Innovation Australia Limited (Hort Innovation) makes no representations and expressly disclaims all warranties (to the extent permitted by law) about the accuracy, completeness, or currency of any information published or made available by Hort Innovation in relation to this SIP.

Your access, use and reliance on any information published or made available by Hort Innovation is entirely at your own risk. The information published or made available by Hort Innovation does not take into account your personal circumstances and you should make your own independent enquiries before making any decision concerning your interests or those of another party or otherwise relying on the information.

Hort Innovation is not responsible for, and will not be liable for, any loss (including indirect or consequential loss), damage, claim, expense, cost (including legal costs) or other liability arising in any way, including from any Hort Innovation or other person's negligence or otherwise from your use or non-use of this SIP, or from reliance on information contained in the material or that Hort Innovation makes available to you by any other means.

## COPYRIGHT NOTICE:

Copyright © Horticulture Innovation Australia Limited 2021

Copyright subsists in this SIP.

Horticulture Innovation Australia Limited (Hort Innovation) owns the copyright in the publication, other than as permitted under the Copyright Act 1968 (Cth).

Copying in whole or in part of this publication is prohibited without the prior written consent of Hort Innovation.

Any request or enquiry to use this publication should be addressed to:

Communications Manager  
Hort Innovation  
Level 7, 141 Walker Street  
North Sydney NSW 2060  
Australia

Email: [communications@horticulture.com.au](mailto:communications@horticulture.com.au)

Phone: 02 8295 2300



# EXECUTIVE SUMMARY

The overarching strategic intent of this Strategic Investment Plan (SIP) is to drive profitability and sustainability of the Australian passionfruit industry by innovating for varietal improvement, superior productivity and consistent fruit quality to drive increases in domestic consumer demand.

The passionfruit SIP 2022-2026 provides a roadmap to guide Hort Innovation's investment of passionfruit industry levies and Australian Government contributions, ensuring investment decisions are aligned with industry priorities.

The Australian passionfruit industry situation in 2019/20 is described on **page 4** with further information provided in **Appendix 1**. The number of growers in the industry has declined in the past five years resulting in the total volume of production decreasing from 5,196 tonnes in 2017 to 4,783 tonnes in 2020. This is mainly due to the decline of the primary purple skin varieties. Passionfruit production occurs in the north of Australia, with major production areas including the Wide Bay region, Cooktown, Daintree and Mareeba in Far North Queensland, the Sunshine Coast in Southeast Queensland, and Tweed Valley in the north of New South Wales.

The strategic intent of the passionfruit SIP provides a summary of how the passionfruit industry will drive change over the life of the SIP, which will ultimately come about by growers having access to new varieties with superior production and consistent fruit quality to meet the demands of Australian consumers.

The financial estimates give an indicative overview of the funding availability for the period of FY2022-FY2026.

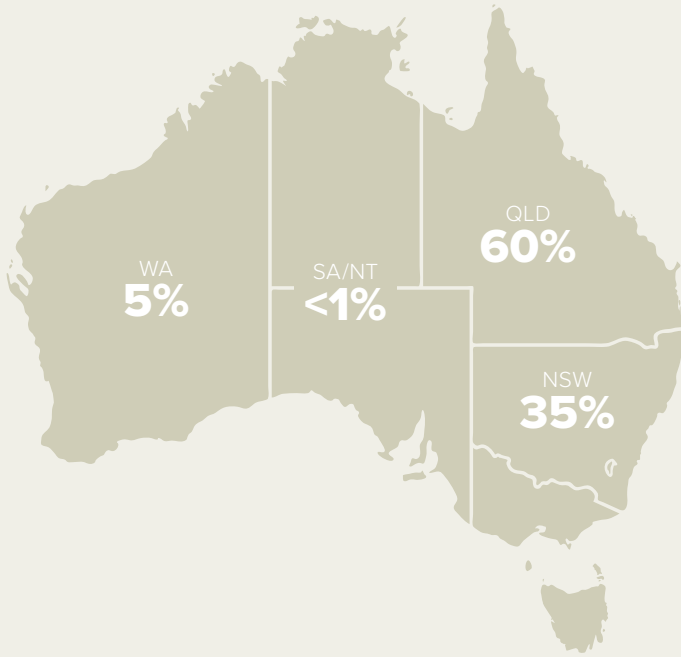
Currently the passionfruit R&D fund is committed until FY2026 due to investments in the highest priority areas for the industry through the National Breeding and Evaluation Program. Careful prioritisation of investment needs are required if further projects are to be funded.

The four outcome areas of this SIP cover significant themes under which programs and investments will be focused. Evaluation and breeding for new varieties continues to be the highest priority for investment for the passionfruit industry and is the key focus for the research and development (R&D) program over the next five years. Under the outcome of demand creation, improving awareness, consideration and purchase intent is a core focus of investment. Extension and communication of information, particularly relating to priority areas are key to the industry's success.

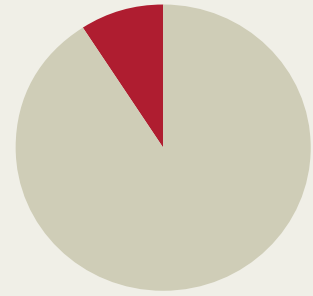
The key performance indicators (KPIs) detail how the impact of each strategy will be measured, for example, availability of new varieties developed for Australian growing conditions with superior production and consistent fruit quality; new knowledge; tools and technical support for adoption of new varieties; and positive influence on consumer consideration for Australian passionfruit.



PRODUCTION REGIONS:

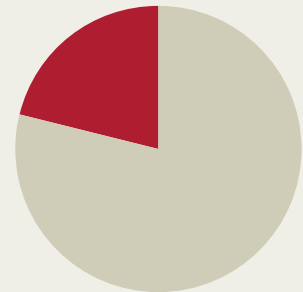


FRESH DOMESTIC/PROCESSING:



■ Processing 9% ■ Fresh domestic 91%

RETAIL VS FOODSERVICE:



■ Retail 81% ■ Foodservice 19%

PRODUCTION WINDOW:



**Year-round**

PRODUCTION VOLUMES:



**4,783 tonnes**

in 2019/20

NUMBER OF GROWERS:



**95**

FARMGATE VALUE OF PRODUCT:



**\$23.6 million**

in 2019/20

PER CAPITA CONSUMPTION:



**0.168 kg**

in 2019/20

VARIETIES:



**Purple**

*Passiflora edulis*

**Golden**

hybrid

**Panama**

*Passiflora edulis f. flavicarpa*

# THE PASSIONFRUIT STRATEGIC INVESTMENT PLAN

The passionfruit SIP is the roadmap that will guide Hort Innovation's oversight and management of the passionfruit industry's investment programs. It lays the foundation for decision-making in investments and represents the balanced interest of the whole industry. The important function of this SIP is to ensure that the investment decisions align with passionfruit industry priorities.

Hort Innovation has led the process for preparing the refresh of the passionfruit SIP, listening and engaging with levy payers and key stakeholders, including Industry Representative Bodies (IRBs), and expertise available through advisory mechanisms and delivery partners. The renewal process involved consultation with and input from a wide range of levy payers, objective analysis of performance and learning from the previous SIP, as well as environmental scanning to identify emergent trends and issues that could impact on future industry profitability and sustainability.

Hort Innovation has valued the support, advice, time, and commitment of all stakeholders that contributed to producing this SIP, especially passionfruit growers.

The whole-of-company approach taken by Hort Innovation to produce this SIP has harnessed existing external and internal knowledge, learning, partnerships and relationships. The output is a tailored plan with which the passionfruit industry can be confident of its strategic intent, including visibility on how investment impacts will be identified. Specific investments to address the SIP strategies and align with industry strategic priorities will be outlined in detail via the passionfruit Annual Investment Plan (AIP). The AIP will be published each year over the lifespan of the SIP and detail the investments that will be prioritised based on potential industry impact, as well as the availability of levy funds. Hort Innovation will advise industry stakeholders when the AIP has been published via established communication channels each year. The AIP will be developed with input from the passionfruit Strategic Investment Advisory Panel (SIAP), IRBs and other key stakeholders.

Producers in the passionfruit industry pay levies to the Department of Agriculture, Water and the Environment, which is responsible for the collection, administration and disbursement of levies and charges on behalf of Australian agricultural industries.

Agricultural levies and charges are imposed on primary producers by government at the request of industry to collectively fund R&D, marketing, biosecurity, and residue testing programs.

Levy is payable on passionfruit that is produced in Australia and either sold by the producer or used by the producer in the production of other goods. The levy on passionfruit is set at 20 cents per carton, or 20 cents per 8 kilograms for fruit not packed in cartons. For processing passionfruit, the levy is 1.5 cents per kilogram. The marketing levy is set at the same rates as the R&D levy.

Hort Innovation has developed this SIP for the passionfruit industry to strategically invest the collected passionfruit levy funds into the priority areas identified and agreed by the passionfruit industry.

This SIP represents the Australian passionfruit industry's collective view of its R&D and marketing needs over the next five years (2022-2026). Learning, achievements and analysis of the previous SIP, consultation with Australian passionfruit levy payers, and synthesis of various strategic documents have been incorporated into the development of this SIP.

**Appendix 3** acknowledges the people who were consulted in the preparation and validation of this SIP. Statistics and data within this publication are sourced from the Australian Horticulture Statistic Handbook 2019/20 and other documents unless stated otherwise and are listed in **Appendix 4**. A list of acronyms used within the document is available in **Appendix 5**.

## Financial estimates

The annual revenue from levy income and Australian Government contributions for eligible R&D set the overall budget parameters for this SIP. Importantly, a portion of these funds is already committed, as the industry has current multi-year projects for R&D and marketing activities. In addition, the levy income from year to year will vary due to changes in seasonal and market conditions.

The financial estimates used for the purpose of developing this SIP are presented in **Table 1** below and are indicative. The intention of the table is to offer a strategic overview of the industry fund at a specific point in time, and the figures will be regularly reviewed to reflect the latest information for the industry and any changes in investment priority. Further details will be available within the AIP each year.

**TABLE 1. Indicative financial estimates for the passionfruit SIP over the life of the SIP**

	2022 \$	2023 \$	2024 \$	2025 \$	2026 \$
<b>R&amp;D</b>					
<b>Balance end FY2021</b>	<b>74,723</b>				
Estimated levy funds (growers)	115,000	115,000	105,000	105,000	105,000
Australian Government contribution	106,098	101,858	88,269	138,734	89,721
Current investments	182,700	160,400	112,000	238,900	44,500
New investments	–	15,000	40,000	–	110,000
Total project investments	182,700	175,400	152,000	238,900	154,500
CCR	29,495	28,317	24,539	38,568	24,943
<b>Projected end balance</b>	<b>80,100</b>	<b>91,600</b>	<b>99,600</b>	<b>64,100</b>	<b>71,000</b>
<b>MARKETING</b>					
<b>Balance end FY2021</b>	<b>50,057</b>				
Estimated levy funds (growers)	115,000	115,000	105,000	105,000	105,000
Current investments	85,000	–	–	–	–
New investments	–	85,000	75,000	75,000	75,000
Total project investments	85,000	85,000	75,000	75,000	75,000
CCR	18,912	18,912	16,687	16,687	16,687
<b>Projected end balance</b>	<b>56,150</b>	<b>62,100</b>	<b>70,270</b>	<b>78,430</b>	<b>86,600</b>

*Disclaimer: All figures are indicative only and may change depending on actual income and expenditure.*

**Balance end FY2021** – The closing balance of the fund as at 30 June 2021

**Estimated levy funds** – Net levy income/revenue that is generated and collected by levy revenue services (LRS)

**Australian Government contribution** – Amount of contribution from the Australian Government on R&D levy-funded expenditure

**Current investments** – Current estimated value of contracted projects

**New investments** – The estimated dollar value that is available for potential new investments for industry subject to industry advice

**CCR** – Corporate cost recovery: the cost to implement and manage R&D and marketing investment programs for each industry

**Projected end balance** – Forecast of the anticipated final position of the fund



# PASSIONFRUIT INDUSTRY OUTCOMES

The overarching strategic intent of this SIP is to drive profitability and sustainability of the Australian passionfruit industry by innovating for varietal improvement, superior productivity and consistent fruit quality to drive increases in domestic consumer demand.

## Industry outcomes

Outcome statements identified and prioritised by the passionfruit industry have been prepared under four key outcome areas of: demand creation; industry supply, productivity and sustainability; extension and capability; and business insights.

### **OUTCOME 1: Industry supply, productivity and sustainability**

Improve industry productivity (inputs/outputs) to maintain local competitiveness and viability of supply.

**Supply and productivity will be supported through improvements to production efficiencies that will drive profitability outcomes, while ensuring long-term sustainability outcomes.**

The strategic intent of this outcome is to accelerate the application of production practices that optimise returns and reduce risk to growers. Achieving the outcome will involve:

- Development of new varieties with superior production and consistent fruit quality
- Development of an industry biosecurity plan and biosecurity risk analyses
- Proactively monitoring potential crop protection regulatory threats and having access to a broader suite of effective, socially acceptable and environmentally sound crop protection solutions.

### **OUTCOME 2: Demand creation**

Contribute to improving consumer knowledge, attitudes and purchase intent to drive volume growth.

**The Australian passionfruit industry will develop existing and future domestic markets. This will contribute to improved consumer knowledge and attitudes and encourage purchase intent to drive category volume growth.**

The strategic intent of this outcome is to maintain and strengthen consumer demand, as the foundation for sustainable expansion of production and consumption in the domestic market. It means the industry is investing to:

- Broaden consumer awareness so that passionfruit is top of mind and purchased more frequently
- Develop strong relationships across the value chain with a shared goal to grow the category
- Support product positioning with consistent quality, evidence of beneficial product nutrition attributes and responsible industry production practices.



**OUTCOME 3: Extension and capability**

Building capability and innovative culture.

**Building capability and an innovative culture will support the passionfruit industry to use the investment outputs across the supply and demand initiatives to better manage risk and create positive change.**

The strategic intent is to manage knowledge, relationships, systems and processes required to communicate and collaborate effectively with internal and external stakeholders. Achieving the outcome will involve:

- Maintaining and improving industry cohesiveness, with most businesses and the majority of industry value chain actively engaged in implementation of this strategy
- Growers, value chain, media and governments being well informed on industry initiatives and achievements as a vital part of regional communities and networks
- Increased on-farm use of R&D outcomes that will build a stronger, more resilient industry and support cross-industry collaboration.

**OUTCOME 4: Business insights**

Measure industry supply (production) and demand (consumer behaviour) data and insights to inform decision-making.

**Business insights will support the industry to remain aware of market and industry trends to drive informed decision-making.**

The strategic intent of this outcome is to deliver data and insights which is foundational to achieving success in the other three outcome areas of demand creation; supply, productivity and sustainability; and extension and capability.

Achieving the outcome will involve reliable baseline data and analysis to provide insights and understand current and emerging trends. Key investments will support the provision of consumer knowledge and tracking, production statistics and forecasting to enable better decision-making process by the industry and individual businesses.

These investments underpin and are complementary to the delivery of the other outcome areas.





# PASSIONFRUIT INDUSTRY STRATEGIES



## Strategies to address industry investment priorities

The strategies and identified impacts for each of the key outcome areas are described in the tables below. The highest priority investments lay the foundation for the SIP, and its implementation will require a balanced approach to ensure the industry has a high likelihood of success over the short term (0-3 years), medium term (3-5 years) and long term (5-10 years).

The ability to deliver on these strategies (and subsequent investments) will be determined by the ability of the statutory levy to provide adequate or sufficient resources. Further resources and efficiencies may become available through alternative funding sources such as Hort Frontiers strategic partnership initiative, external grants and/or cross-industry initiatives.

### OUTCOME 1: Industry supply, productivity and sustainability

The Australian passionfruit industry has increased profitability, efficiency and sustainability through innovative R&D and new varieties

STRATEGIES	POTENTIAL BENEFIT OR IMPACT
1. Develop new varieties with superior production and consistent fruit quality	<ul style="list-style-type: none"> <li>Enhanced grower profitability</li> <li>A replacement variety strengthens industry resilience</li> </ul>
2. Improve industry preparedness and resilience to biosecurity threats	<ul style="list-style-type: none"> <li>Reduced impacts of exotic and endemic plant pests</li> </ul>
3. Prioritise the major crop protection gaps through a Strategic Agrichemical Review Process (SARP)*	<ul style="list-style-type: none"> <li>Available registered or permitted pesticides are evaluated for overall suitability against major disease, insect pests and weed threats. The SARP aims to identify potential future solutions where tools are unavailable or unsuitable</li> </ul>
4. Support and co-ordinate crop protection regulatory activities with the potential to impact plant protection product access, both in Australia and internationally*	<ul style="list-style-type: none"> <li>Regulatory Risk Assessments have informed proactive strategic priority setting to avoid pest management gaps in the event access or use is negatively impacted</li> </ul>
5. Generate residue, efficacy and crop safety data to support applications to the Australian Pesticides and Veterinary Medicines Authority (APVMA) that seeks to gain, maintain or broaden access to priority uses for label registrations and/or minor use permits for crop protection needs*	<ul style="list-style-type: none"> <li>Crop protection solutions meet industry priority needs as identified in the industry SARP or biosecurity plan</li> </ul>

### OUTCOME 2: Demand creation

Demand creation supports the Australian passionfruit industry to develop existing and future domestic markets.

STRATEGIES	POTENTIAL BENEFIT OR IMPACT
1. Increase domestic consumer demand for fresh, quality Australian passionfruit through improving knowledge, attitudes and purchase intent	<ul style="list-style-type: none"> <li>Increased consumer demand for Australian passionfruit</li> </ul>

**OUTCOME 3: Extension and capability**

Building capability and an innovative culture in the Australian passionfruit industry maximises investments in productivity and demand.

STRATEGIES	POTENTIAL BENEFIT OR IMPACT
1. Deliver communication and extension capability to support positive change in the areas of new varieties, pest and disease management and demand creation	<ul style="list-style-type: none"> <li>A change/progression in KASA for grower profitability and sustainability which supports the adoption of BMPs and innovations</li> </ul>
2. Provide opportunity for engagement between industry and across industry members and stakeholders	<ul style="list-style-type: none"> <li>Improved networks and cross-industry collaboration to increase efficiencies, awareness of R&amp;D outputs, and build a stronger, more resilient industry</li> </ul>

**OUTCOME 4: Business insights**

The Australian passionfruit industry is more profitable through informed decision-making using consumer knowledge and tracking and independent reviews.

STRATEGIES	POTENTIAL BENEFIT OR IMPACT
1. Increase industry alignment with quality and brand-positioning opportunities driven by consumer insights*	<ul style="list-style-type: none"> <li>Provision of business insights to deliver against demand, supply and extension outcomes</li> </ul>

\* Foundational investments provide data and information that underpin the delivery of other SIP outcome areas and will be aligned to this strategy. Foundational investment areas include:

- Consumer behavioural data
- Consumer usage and attitudes, and brand health tracking data
- Impact assessments
- Trade data
- Crop protectant data.



“The important function of this SIP is to ensure that the investment decisions align with passionfruit industry priorities.”



# PASSIONFRUIT SIP MONITORING AND EVALUATION

The passionfruit SIP Monitoring and Evaluation (M&E) Framework development has been informed by Hort Innovation's Organisational Evaluation Framework.

Progress against the SIP will be reported in Hort Innovation publications and through industry communication channels. The SIP outcomes and strategies are used to inform KPIs that in turn drive the investments and individual projects to deliver on the SIP. Projects responsible for delivering the strategy aligned with each KPI will collect the data.

An M&E and reporting framework is shown below. The framework shows what will be measured to demonstrate progress against the SIP and how metrics will be tracked. Reporting on KPIs will be processed through various formal channels to inform industry and government investors of progress, performance, and impact. Data sources to support M&E will be identified and collected as part of the requirements for each levy investment.

Hort Innovation will facilitate the regular review of the SIP to ensure it remains relevant to industry.



## Passionfruit SIP Monitoring and Evaluation Framework

The Passionfruit SIP M&E Framework is shown below. It includes KPIs and data collection methods both at a macro/industry (trend) level and at more specific SIP strategic level/s.

OUTCOME	STRATEGIES	KPIs
<b>Industry supply, productivity and sustainability</b>		
<b>Outcome 1:</b> The Australian passionfruit industry has increased profitability, efficiency and sustainability through innovative R&D, pest and disease management and new varieties.	1. Develop new varieties with superior production and consistent fruit quality	<ul style="list-style-type: none"> <li>• Availability of new varieties developed for Australian growing conditions with superior production and consistent fruit quality</li> <li>• New knowledge, including data, on the performance of advanced selections and varieties</li> <li>• A collection/arboretum of passionfruit genetics that is used by researchers and industry</li> </ul>
	2. Improve industry preparedness and resilience to biosecurity threats	<ul style="list-style-type: none"> <li>• Maintenance/tracking of the implementation of an industry biosecurity plan</li> <li>• Development of risk analyses of high priority pests including entry pathways, establishment and spread potential</li> </ul>
	3. Prioritise the major crop protection gaps through a SARP*	<ul style="list-style-type: none"> <li>• Coordinated industry priority setting with a clear outlook of gaps and risks in existing pest control options</li> <li>• Industry priority needs are published and shared with stakeholders, including registrants</li> </ul>
	4. Support and co-ordinate crop protection regulatory activities with the potential to impact plant protection product access, both in Australia and internationally*	<ul style="list-style-type: none"> <li>• Regulatory Risk Assessments maintained</li> </ul>
	5. Generate of residue, efficacy and crop safety data to support applications to the APVMA that seeks to gain, maintain or broaden access to priority uses for label registrations and/or minor use permits for crop protection needs*	<ul style="list-style-type: none"> <li>• Data to support applications to the APVMA and the establishment of Maximum Residue Limits (MRLs)</li> </ul>
<b>Demand creation</b>		
<b>Outcome 2:</b> Demand creation supports the Australian passionfruit industry to develop existing and future domestic markets.	1. Increase domestic consumer demand for fresh, quality Australian passionfruit through improving knowledge, attitudes and purchase intent	<ul style="list-style-type: none"> <li>• Positive influence on consumer preference, knowledge, attitudes, and purchase intent</li> <li>• Use of nutritional information to support consumer demand</li> </ul>

OUTCOME	STRATEGIES	KPIs
<b>Extension and capability</b>		
<b>Outcome 3:</b> Improved capability and an innovative culture in the Australian passionfruit industry maximises investments in supply and demand.	1. Deliver communication and extension capability to support positive change in the areas of new varieties, trial sites, pest and disease management and demand creation	<ul style="list-style-type: none"> <li>Establishment of a baseline and then increased share of industry (hectares or vines) with positive change in practice and implementation concerning targeted high priority areas</li> </ul>
	2. Provide the opportunity for engagement between industry and across industry members and stakeholders	<ul style="list-style-type: none"> <li>Grower satisfaction with growth in cooperation within industry and across industries leading to business and industry innovations (i.e., survey data)</li> </ul>
<b>Business insights</b>		
<b>Outcome 4:</b> The Australian passionfruit industry is more profitable through informed decision-making using consumer knowledge and tracking and independent reviews.	1. Increase industry alignment with quality and brand-positioning opportunities driven by consumer insights*	<ul style="list-style-type: none"> <li>Delivery of consumer insights strategy</li> <li>Evidence that consumer insights inform market engagement (e.g., case studies)</li> <li>New consumer knowledge available for growers</li> </ul>

\* Foundational investments provide data and information that underpin the delivery of other SIP outcome areas and will be aligned to this strategy. Foundational investment areas include:

- Consumer behavioural data
- Consumer usage and attitudes, and brand health tracking data
- Impact assessments
- Trade data
- Crop protectant data.

## Reporting framework

Hort Innovation will use dynamic reporting aligned to the Organisational Evaluation Framework to report regularly on progress and performance. Reporting will be processed through formal channels to inform industry and government investors.

A review of investment performance against the respective industry outcome and/or strategy-level KPIs for the passionfruit SIP will be completed annually as the primary reporting mechanism. The SIP performance report will provide:

- Evidence of progress towards achieving the industry-specific outcomes and strategies through an assessment of the KPIs identified in the SIP
- Evidence of progress towards cross-industry investment strategies and outcomes. This will involve Hort Innovation’s whole-of-horticulture reporting obligations and corporate plan, annual reports and Hort Innovation’s Annual Operating Plan.

SIP performance reports will also inform the Australian Government of progress towards achieving government priorities. In particular, reporting will support Hort Innovation to meet the Performance Principles and requirements contained in the [Deed of Agreement 2020-2030](#).





# COLLABORATION AND CROSS-INDUSTRY INVESTMENT

Based on advice from industry throughout the engagement process, Hort Innovation understands that Australian horticulture industries have common issues, and in turn have identified prospective areas for collaboration and cross-industry or regional investment.

These opportunities have been included as strategies across multiple industry SIPs where relevant and required. By delivering more multi-industry collaboration in RD&E, marketing and international trade, Hort Innovation aims to support more effective and efficient outcomes for growers and the wider horticulture sector. This includes driving investment through the Hort Frontiers strategic partnership initiative. Importantly, while this approach acknowledges there is value in solving issues across industries and regions, it does not reduce the importance of industry-specific initiatives.

Cross-industry/regional R&D opportunities identified for the passionfruit industry include biosecurity preparedness programs.

Cross-industry areas of collaboration for demand-driving outcomes provide the opportunity to advance the prosperity of the sector through gaining efficiencies in the delivery of the program and contributing to stronger overall outcomes. By collaborating as one sector to win the hearts and minds of the consumers, in addition to individual demand-driving programs, there is the potential to enhance the total category value proposition, contributing to driving returns for Australian growers.

Areas of consideration for collaboration for demand-driving outcomes across the lifespan of the passionfruit SIP 2022-2026 include:

- All-of-horticulture consumer marketing campaigns designed to drive awareness, consideration, and purchase behaviour change
- Communications to bring horticulture to top of mind (saliency) and reposition the benefits they provide to Australian and international consumers

- Retail partnerships to advance total category and shopper demand-driving programs
- A global brand platform to reinforce the unique selling proposition of Australian-grown horticultural produce and drive preference with international consumers.

## Strategic science and research focus

Collaboration across the agriculture research community is essential, including with IRBs and organisations such as the CSIRO, universities, private enterprise and state government agencies. Hort Innovation is a member of the National Horticulture Research Network (NHRN) together with other senior horticultural R&D representatives from state and Australian Government agricultural agencies. The NHRN is responsible for the development and implementation of the broader Horticulture RD&E Strategy under the National Primary Industries RD&E Framework.

During the engagement process, key delivery partners were contacted including lead agencies within the NHRN Framework as well as specific delivery partners for each industry. The lead agency involved with the passionfruit industry investment program, Department of Agriculture and Fisheries, Queensland (DAFQ) was engaged during the development of this SIP to ensure consideration and strategically aligned priorities for the passionfruit industry. In addition, strategic priorities and opportunities identified by Passionfruit Australia Inc. have been considered in the development of the passionfruit SIP where applicable.

**TABLE 2: Government and key agency priorities**

Passionfruit Australia Inc. strategic priorities	DAFQ priorities	Rural RD&E for Profit priorities	Australian Government Science and Research priorities
Advocacy	Inspire talent, investment and ideas to drive industry development	Advanced technology	Food
Industry development	Anticipate and respond to the emerging needs of the economy and environment	Biosecurity	Soil and water
Scholarship – Noel Day	Support sustainable and responsible industry	Soil, water and managing natural resources	Advanced manufacturing
Biosecurity		Adoption of R&D	Environmental change
Pest and disease management			Health
Connectivity across value chain			

This SIP has been developed alongside the government and key agency priorities listed in **Table 2**, with consideration of issues faced by the passionfruit industry. These strategic areas further emphasise the opportunity and importance of cross-industry and regional collaboration. All the priority areas are of importance to Australian horticulture, and these will play a role in driving the efficiency and effectiveness of investment across the sector.

## Annual investment planning

Specific investments to address the SIP strategies and align with industry strategic priorities will be outlined in detail each year via the passionfruit AIP. Investment decisions are guided by the SIP and prioritised based on potential industry impact, as well as the availability of levy funds each year. The AIP will be developed with input from the passionfruit SIAP, which is made up of growers and other industry representatives as well as IRBs and other key stakeholders. Wherever possible, investments will be aligned to form multi-industry projects to increase the efficiency of funding availability. Details of the SIAP can be found on the Hort Innovation website [here](#), and the AIP will be published on the same page each year.

## Investment opportunities through Hort Frontiers

Innovation is key to the future success of Australian horticulture. The next evolution of the long-range, higher risk and transformational R&D that has the potential to make a significant impact will be possible through Hort Innovation's Hort Frontiers strategic partnership initiative.

Hort Frontiers is a strategic partnership initiative that facilitates collaborative, cross-industry investments focused on the longer term and more complex themes identified as critical for Australian horticulture by 2030. The partnership framework is currently being established and will include a number of key investment themes for potential investment to guide the initiative and drive transformational R&D across horticulture. Key investment themes will include:

- Environmental sustainability (water, soil and climate)
- Pollination
- Green cities
- Biosecurity
- Health, nutrition and food safety
- Advanced production systems
- International markets
- Leadership
- Novel food and alternate uses (waste reduction).

The development of these areas for investment will benefit all of horticulture, with support from partners with aligned priorities to co-invest in deliverables identified that require alternative funds available outside the levy. Hort Frontiers is being developed to align with the Australian-grown Horticulture Sustainability Framework and invest in specific impact areas to drive innovation and sustainability initiatives.

The passionfruit industry views a number of these investment areas as opportunities for success into the future, including:

- Health, nutrition and food safety
- Leadership
- Breeding and genetics.

Partnering with Hort Frontiers on these areas would provide the passionfruit industry with opportunities for access to world-class research, specialised project management teams and large-scale R&D.

### Australian-grown Horticulture Sustainability Framework

Hort Innovation has developed the Australian-grown Horticulture Sustainability Framework, aiming to strengthen the horticulture industry’s sustainability to meet the changing expectations and needs of growers, consumers, the community, investors and governments. The framework applies across the whole of Australian horticulture, including fruits, vegetables, nuts, nursery stock and turf. Through widespread consultation with industry and external groups, proposed sustainability goals and indicators were identified and are detailed within the framework. The framework is aligned to the UN Sustainable Development Goals.

Four key pillars were identified in the framework (*Figure 1*).





The framework should be cross-referenced when undertaking prioritisation of investments. At the time of publication, Hort Innovation is working with industry groups regarding the overall responsibility for the framework, setting and reporting progress against the framework targets and performance measures.

View the Australian-grown Horticulture Sustainability Framework on the Hort Innovation website [here](#).

**Table 3** provides examples of passionfruit SIP strategies that illustrate how the industry is already aligning to the framework.

**TABLE 3: Passionfruit SIP strategy examples showing how the industry is already aligning to the Australian-grown Horticulture Sustainability Framework**

STRATEGY	IMPACT	SUSTAINABILITY GOAL
Develop new varieties with superior production and consistent fruit quality	<ul style="list-style-type: none"> <li>Enhanced grower profitability</li> <li>A replacement variety strengthens industry resilience</li> </ul>	Nourish & Nurture
Improve industry preparedness and resilience to biosecurity threats	<ul style="list-style-type: none"> <li>Reduced impacts of exotic and endemic plant pests</li> </ul>	Planet & Resources
Increase domestic consumer demand for fresh, quality Australian passionfruit through improving knowledge, attitudes and purchase intent	<ul style="list-style-type: none"> <li>Increased consumer demand for Australian passionfruit</li> </ul>	Nourish & Nurture
Deliver communication and extension capability to support positive change in the areas of new varieties, pest and disease management and demand creation	<ul style="list-style-type: none"> <li>A change/progression in KASA for grower profitability and sustainability which supports the adoption of best practice and innovations</li> </ul>	People & Enterprise



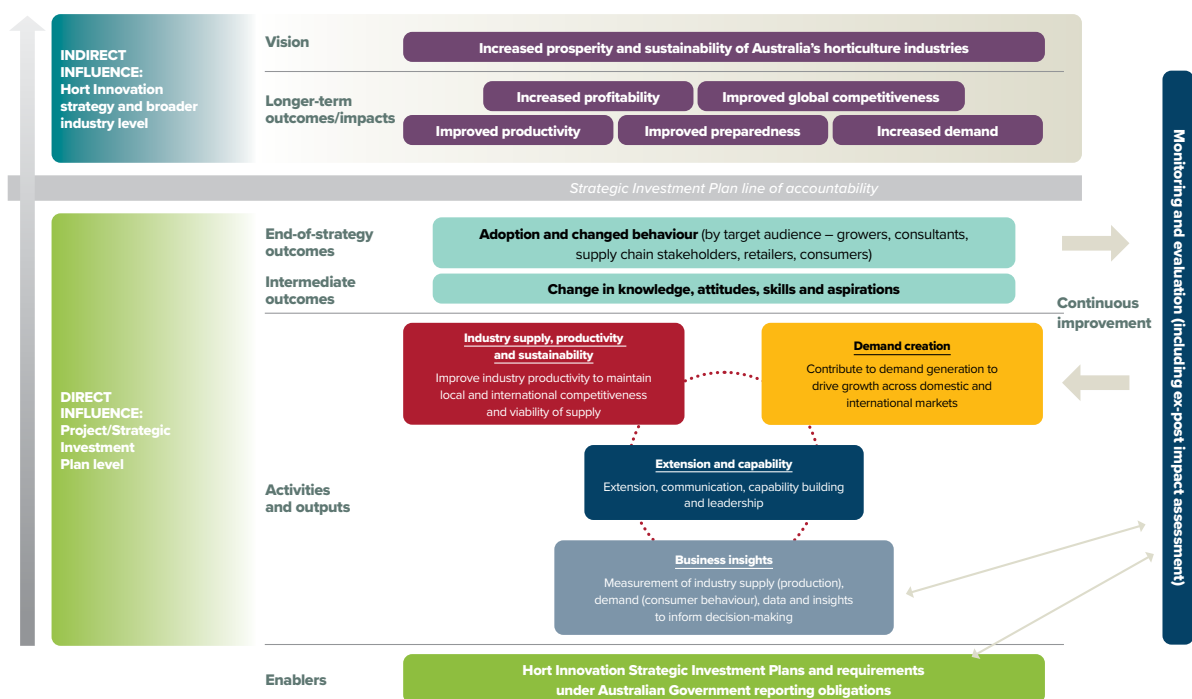
# HORT INNOVATION



## Strategic Investment Plan logic

The SIP logic (**Figure 2**) identifies how investment activities and outputs (delivered through each SIP outcome area) will support changes in industry KASA, which drive adoption and behaviour change. Beyond the SIP, investment will contribute to driving longer-term impacts for the sector like increased preparedness, demand, productivity, global competitiveness and profitability. Realising these impacts will support Hort Innovation’s vision of increased prosperity and sustainability of Australia’s horticulture industries.

**FIGURE 2.** Strategic Investment Plan logic



## Aligning to Hort Innovation investment priorities

Hort Innovation is committed to sustainable growth in horticulture, with the overarching aim of increasing the sector’s value to \$20 billion by 2030. We will do this through implementing the SIP and investments against the three core pillars, committed to:

1. Drive knowledge and innovation into horticulture industries
2. Deliver the highest value R&D, marketing and international trade investments across industries now and into the future
3. Enable activities that drive all strategic imperatives.

Hort Innovation is governed by a Deed of Agreement with the Australian Government, which allows for the transfer and investment of levies and Australian Government contributions.

As a Research and Development Corporation (RDC), Hort Innovation can leverage industry levy investments in research, development and extension (RD&E) with Australian Government contributions up to a value of 0.5% of the industry’s gross value of production. All investments made by Hort Innovation are thoroughly considered to ensure they contribute to the guiding performance principles:

- Productivity
- Profitability
- Preparedness for future opportunities and challenges
- Competitiveness
- Demand: demonstrates how productivity, preparedness and demand lead to profitability and competitiveness and sustainability.

# APPENDICES



## APPENDIX 1: Industry context

### Industry supply chain

The passionfruit industry has good engagement with independent retailers, which results in higher-quality fruit reaching the consumer and higher prices being achieved. The industry recognises that it has a challenge to engage major retailers so that passionfruit is presented and displayed to maximise quality, price and to ultimately satisfy the consumer.

Many growers produce passionfruit as a second, third or fourth crop and have minimal engagement with industry bodies or supply chains. Specific strategies for engaging growers including their participation in data collection, best practice adoption and strategy-setting should be considered.

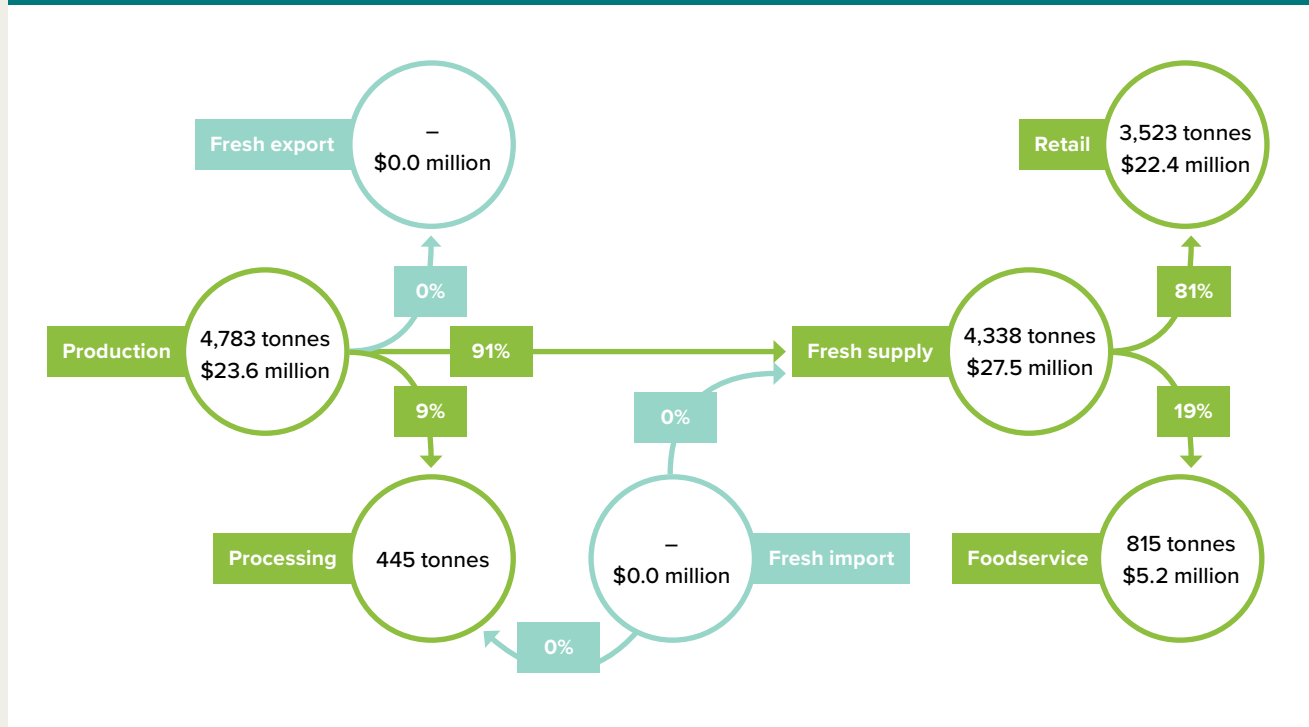
Passionfruit farm establishment requires a high initial outlay due to the costs of the trellis infrastructure, high use of grafted vines, grading and packing equipment, cold room and associated farm machinery.

The bulk of passionfruit sales occur through wholesale markets in Brisbane, Sydney and Melbourne.

The influx of cheaper processed products (pulp) into the Australian market from suppliers such as Thailand and South America is seen as a concern by the industry because of the industry's inability to compete on price. No country has applied to import fresh fruit, however, there is a possibility that fresh imports may become a reality if the industry is unable to address issues such as volatile supply and high price fluctuations within the domestic market. Currently only 9% of production is sent to processing.

The industry has developed a grading guide in partnership with DAFQ to help growers assess fruit quality. The grading guide is used for both purple and Panama varieties and takes the form of a poster that is displayed in packing sheds to assist growers in meeting the requirements of the produce specifications. A recent industry report recommended that the grading guide be updated.

**FIGURE 3. Passionfruit supply chain, 2019/20**

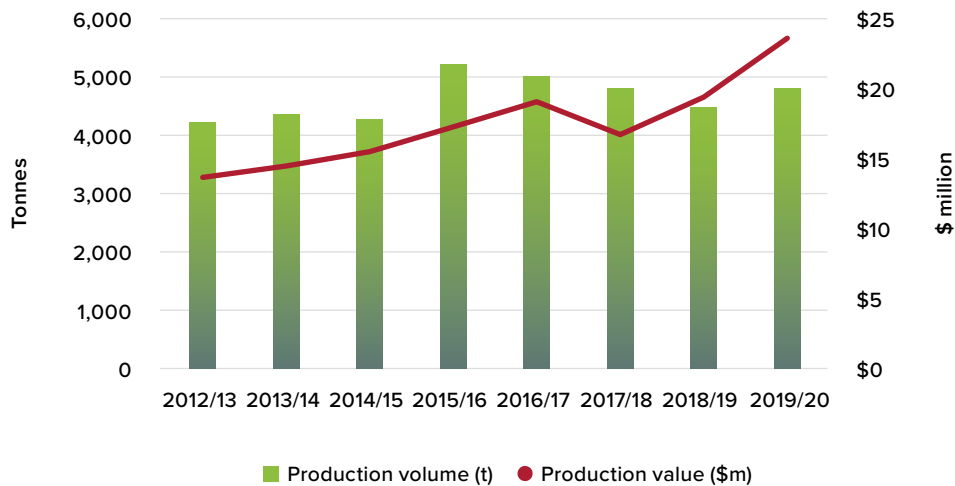


Source: Australian Horticulture Statistics Handbook (2019/20)

Passionfruit is grown exclusively for the domestic market, with no fresh exports. Processing is a small market, making up 9% of industry production, with foodservice a relatively large market at 18% of fresh supply, which is higher than the average for all fruit products. There are no imports for fresh passionfruit to compete with (*Figure 3*).

### Industry production

**FIGURE 4.** Passionfruit production, 2012/13 to 2019/20



**Source:** Australian Horticulture Statistics Handbook (2019/20)

Passionfruit production has remained relatively stable since 2012/13, averaging 4,600 tonnes per annum. Production peaked in 2015/16 at 5,196 tonnes. Production value, on the other hand, has experienced significant growth, from \$14 million in 2012/13 to a peak of \$24 million in 2019/20. In the past two years, this has been driven by price increases, from \$3.51 per kilogram in 2017/18 to \$4.93 per kilogram in 2019/20 (*Figure 4*).

Passionfruit production is highly labour intensive during the peak seasons where harvesting of purple varieties is by manually picking up off the ground once or twice a day before the fruit gets sunburnt. The Panama variety is generally picked from the vine.

A key issue that affects production is that vine varieties appear to age quickly and that even new vines start to lose productivity over short periods. The current commercial varieties are now starting to show signs of ageing that have affected older varieties – the vines either produce a large amount of small-sized fruit or a small amount of large-sized fruit. Therefore, the industry places such importance on the development of new varieties.



## APPENDIX 2: Passionfruit industry situation analysis

At the time of refreshing the SIP in 2021, the global coronavirus (COVID-19) pandemic continues to affect horticulture industries to varying degrees. The outcome and ultimate impact of the pandemic are unknown. Investment areas that may be influenced over the period of this SIP include export and trade relationships, domestic and international demand, logistics and supply chain, labour supply – all have potential impacts on grower profitability.

Environmental, economic and social sustainability are vitally important to Australian horticultural growers and industries. Customers, consumers, and investors also seek information about the sustainability and ethics of how their food is produced. Sustainability is particularly crucial as topics including climate variability, health and ethics continue to shape the social, environmental, and political landscape for agricultural industries. The impact of these issues may have influence on a range of investment areas for horticulture from production practices and land management, demand and reputation of products, quality expectations and cultural/community engagement.

### Strengths, weaknesses, opportunities and threats

**Table 4** has been used to analyse the passionfruit industry's strengths, weaknesses, opportunities, and threats (SWOT). The SWOT tool assists the industry to build on what works, observe what is lacking, minimise risks, and take the greatest possible advantage of chances for success.

**TABLE 4: Passionfruit SWOT analysis**

The passionfruit industry	
<b>Strengths</b>	<ul style="list-style-type: none"> <li>• Passionfruit has a strong nutritional profile and are somewhat convenient to eat</li> <li>• Unique flavour, fragrance and consumption experience</li> <li>• Fruit available year-round although with significant seasonal variation in supply and therefore price</li> <li>• Strong National Passionfruit Industry Biosecurity Plan (2012) in place which outlines the key threats to the industry and risk mitigation plans</li> </ul>
<b>Weaknesses</b>	<ul style="list-style-type: none"> <li>• Fragmented industry with many small growers susceptible to seasonal variation makes it difficult to ensure continuity of supply</li> <li>• Inaccurate sorting and packing require resorting by the wholesalers</li> <li>• Limited awareness of alternate varieties with purchase decisions done mostly on impulse</li> <li>• Reliance on casual labour to pick up fruit before it gets sunburnt with up to 30% unsuitable for the higher value fresh market, although, this was only 7% in 2015</li> <li>• Susceptible to many pests and diseases</li> <li>• Reliance on planting new vines every two to three years</li> <li>• Recent price sensitivities from consumers</li> </ul>
<b>Opportunities</b>	<ul style="list-style-type: none"> <li>• Further training in the awareness and delivery of the value of a standardised grading, packing and labelling regime</li> <li>• Market perception of a healthy, easy-to-eat fruit, high in potassium and fibre</li> <li>• Collection and reporting of production data to enable the industry to be able to monitor passionfruit production across Australia and provide supply forecasts</li> <li>• Use of irradiation for disinfestation opens export markets which would be otherwise closed</li> <li>• Mechanisation of harvesting methods (although cost benefit may not be there for small farms)</li> <li>• Introduction of a clean planting scheme if viruses could be eliminated from popular cultivars or new varieties introduced which are resistant (positive R&amp;D results in this area)</li> <li>• Focus on positioning fruit in a relevant way to consumers to aid consideration</li> </ul>

### The passionfruit industry

#### Threats

- Reliance and effect of changes in Australia's regulatory environment concerning biosecurity, R&D support, and use of agricultural input and resources, such as water, chemicals and land
- Increased competition from fresh imported product if supply continues to be variable with significant price fluctuations and from the import of pulp from lower cost countries such as Thailand and South America
- Loss of supply of new plants from accredited nurseries through market failure or disease outbreak
- Low cost imported pulp makes sending fruit for processing unattractive for growers

## APPENDIX 3: People consulted

The following people are acknowledged for their contribution to the passionfruit SIP development process.

NAME	INDUSTRY ROLE	REGION
Melissa Smith	Grower	Sunshine Coast, QLD
Dennis Chant	President, Passionfruit Australia Inc.	Murwillumbah, QLD
Tina McPherson	Grower	Bundaberg, QLD
Jane Richter	Passionfruit Industry Communications Manager; Grower	Sunshine Coast, QLD
Ross Brindley	Program Reference Group member; Grower	Bundaberg, QLD
Keith Paxton	Grower	Woombye, QLD
Brian Westwood	Grower	Mutchilba, QLD
Sue Granger	Grower	Boganger, NSW
Tim Johnson	Grower	Clothiers Creek, NSW
Anton Stretch	Grower	Beerwah, QLD
Aidan Hutton	Marketer	Sydney, NSW
James Gordon	Grower	Yandina, QLD
Ian Constable	Grower	Dulguigan, NSW
Cynthia Barbagallo	Grower	Mareeba, QLD
Sacha Harty	Industry Services Manager, Passionfruit Australia Inc.	Murwillumbah, NSW

## APPENDIX 4: Reference material

Horticulture Innovation Australia Limited, 2012, Passionfruit Strategic Investment Plan 2012-17

Horticulture Innovation Australia Limited, 2019, Growing into the Future: Strategy 2019-2023

Horticulture Innovation Australia Limited, 2020, Australian Horticulture Statistics Handbook 2020/21

Horticulture Innovation Australia Limited, 2021, Australian-grown Horticulture Sustainability Framework

Passionfruit Australia Inc., 2021, <https://passionfruitaustralia.org.au/>

## APPENDIX 5: List of acronyms

<b>AIP</b>	Annual Investment Plan
<b>APVMA</b>	Australian Pesticides and Veterinary Medicines Authority
<b>BMP</b>	best management practice
<b>CSIRO</b>	Commonwealth Scientific and Industrial Research Organisation
<b>FY</b>	financial year
<b>IRB</b>	Industry Representative Body
<b>KASA</b>	knowledge, attitudes, skills and aspirations
<b>KPI</b>	key performance indicator
<b>M&amp;E</b>	monitoring and evaluation
<b>MRL</b>	Maximum Residue Limit
<b>NHRN</b>	National Horticulture Research Network
<b>R&amp;D</b>	research and development
<b>RDC</b>	Research and Development Corporation
<b>RD&amp;E</b>	research, development and extension
<b>SARP</b>	Strategic Agrichemical Review Process
<b>SIAP</b>	Strategic Investment Advisory Panel
<b>SIP</b>	Strategic Investment Plan
<b>SWOT</b>	strengths, weaknesses, opportunities, and threats



# 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](mailto:communications@horticulture.com.au)

[www.horticulture.com.au](http://www.horticulture.com.au)