

## **Final Report**

# **Strategic Agrichemical Review Process (SARP) 2023 updates**

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Strategic Agrichemical Review Process (SARP) 2023 updates (MT23001)

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## Public summary

The objective of this project was to update fifteen (15) SARP Reports that were last undertaken during 2019-2020, noting that only 13 SARP reports were produced following the combination of the three berry SARPs.

This process was undertaken using the following steps:

- Assess the importance of diseases, insects and weeds (plant pests) that can affect a horticultural industry.
- Evaluate the availability and effectiveness of fungicides, insecticides and herbicides (pesticides) to control plant pests.
- Determine any gaps in the pest control strategy.
- Identify suitable new or alternative pesticides to address the gaps.

The results of this process provide the horticulture industries with a clear indication of where they should pursue additional pest control options to address priority issues in each crop type, either through new registrations in conjunction with registrants or by obtaining minor use permits via the Australian Pesticide and Veterinary Medicines Authority (APVMA). The SARP reports also inform priorities to be pursued via the AgVet Grants program based on high priority needs and gaps for each industry.

SARP Reports updated:

Crop	Year Previously Updated	Crop	Year Previously Updated
Almond	2020	Olive	2020
Avocado	2020	Onion	2020
Banana	2020	Papaya	2020
Berry	2020	Passionfruit	2020
Lychee	2020	Pineapple	2019
Macadamia	2020	Summerfruit	2020
Melon	2019		

The project established current pest priorities for the industries listed. Online surveys were conducted for all industries, and workshops were conducted with the berry, banana and pineapple industries with informal industry consultation also carried out for the macadamia, melon and olive industries. Thirteen SARP reports have been published (Berries, Avocado, Almonds, Banana, Macadamia, Melons, Passionfruit, Pineapple, Papaya, Onion, Lychee, Olive, Summerfruit) and are publicly available on the Hort Innovation website<sup>1</sup>.

## Keywords

SARP, pesticides, pests, diseases, weeds, crop protection

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<sup>1</sup> <https://www.horticulture.com.au/growers/help-your-business-grow/research-reports-publications-fact-sheets-and-more/grower-resources/minor-use-articles/current-strategic-agricultural-review-process-sarp-documents/>

## Introduction

Hort Innovation, and previous iterations of the RDC, have regularly funded Strategic Agrichemical Reviews of horticulture commodities.

A SARP involves a desktop audit and industry liaison component to assess the importance of plant pests affecting a horticultural industry. The SARPs aim to identify key pest priorities by examining existing registrations and determining where a lack of suitable options exist to control key pests.

Determination of priority chemical options that industry may pursue for inclusion on labels or minor use permits include considerations of resistance management, residue profiles, withholding periods, efficacy, trade requirements, human safety, environmental issues, and the potential to work into Integrated Pest Management (IPM) systems.

SARPs for the various industries were undertaken during MT10029 and involved meetings held around Australia with growers, retailers, consultants, Industry Development Officers (IDO's) and government agencies. During these projects the SARP identified pests and weeds of concern for horticulture growers and available management options (pesticide and non-pesticide solutions) were evaluated for these threats. Ultimately, a SARP determines gaps in the industry pest control strategy and potential new or alternative pesticides to address these gaps.

The minor use program through Hort Innovation originally initiated the Strategic Agrichemical Review Process to give strategic direction to the minor use program investments, and this has also played a pivotal role in the successful development of a preliminary prioritisation list for the Assistance Grants – Access to Industry priority Uses of AgVet Chemicals Program.

To help address the 'minor use' problem, the Australian Government has committed \$33.8 million over fifteen years (from 2014 to 2029) to the Improved Access to Agricultural and Veterinary Chemicals program. Approximately \$25.7 million of the committed funding has been approved so far to assist with data generation to support an application to the Australian Pesticides and Veterinary Medicines Authority (APVMA) that seeks to gain, maintain or broaden access to priority uses of agvet chemicals.

The results of the thirteen (13) SARP reports will provide the horticulture industries with a clear indication of where the horticultural industry should pursue additional pest control options to address priority pest issues in each crop type, either through new registrations in conjunction with registrants or by obtaining minor use permits via the APVMA.

The SARP reports also inform priorities to be pursued via the AgVet Grants program based on high priority needs and gaps for each industry.

## Methodology

The objectives of this project were to help Hort Innovation to update the Strategic Agrichemical Review Process (SARP) Reports for the 13 crops listed above through the process of a desktop audit. The project undertook the following steps:

- Assessed the importance of diseases, insects and weeds (plant pests) that can affect a horticultural industry.
- Evaluated the availability and effectiveness of fungicides, insecticides and herbicides (pesticides) to control plant pests.
- Determine any gaps in the pest control strategy.
- Identify suitable new or alternative pesticides to address the gaps.

The results of this process provide the various industries with sound pesticide usage for the future that the industry can pursue for registration with the manufacturer, or minor-use permits with the Australian Pesticide and Veterinary Medicines Authority (APVMA).

### Detailed workplan

#### **1 November 2023 - 28 February 2024**

- Design, create and conduct an internet-based survey to determine the priority pests of the 13 crop types. This was conducted using Survey Monkey and established the pest issues in each crop as high, medium or low priorities. It included growers, advisers and any other relevant industry stakeholders.
- Prepared survey questions for the 13 crop types, using the Hort Innovation templates used previously.
- Identified any additional relevant information such as Hort Innovation reports, industry communications, conference presentations etc. to assist in updating the list of priorities prior to the survey and to identify any other relevant information to refer to in updating the SARP. [Confer with key industry representatives as necessary]
- Finalised the design of the 13 surveys and provided the survey links to the Hort Innovation communications team to include on the Hort Innovation website and to distribute to each industry by no later than 30 November.
- Monitored survey responses and followed up with industry contacts to elicit additional responses as required. Survey closing dates were not set in the first instance.
- Conducted online workshops with the berry industry to validate information collected through the surveys

#### **1 March – 30 April 2024**

- Additional time was allowed for extending data collection for industry surveys if required. Data was augmented by contacting key industry contacts as necessary.
- Survey reports were prepared for each industry, detailing pest priorities (high, moderate, low) as identified.

#### **1 May 2024 – 15 June 2025**

- Reviewed list of priorities ranked as high, moderate and low for each plant pest group (disease, insects and weeds)
- Updated current pesticides available via label registrations or minor use permits using online PUBCRIS and permit search tools and associated databases.
- Updated available pesticide use patterns, IPM ranking/compatibility, mode of action and chemical group, primarily by referencing PUBCRIS/infopest database and Croplife Australia website.
- Identified pesticides at risk (under review and/or limited uses) via MT20007 Regulatory Support & Co-ordination – AKC consulting. Liaised with Kevin Bodnaruk to incorporate information on “at risk”

pesticides as identified through his project MT20007. Referred to APVMA review schedule as necessary and, where available, major foreign agency or international activity.

- Identified appropriate solutions through the outcomes of the AgChem Forum's or similar market intelligence and their overall suitability (IPM compatibility, Chemical group to manage resistance, risk profile, existing domestic MRL's or global MRL's including any potential trade barriers, efficacy, OH&S, environmental safety and sustainability).
- Updated MRL tables to include Australian MRL's, Codex and any export market MRL's using official online sources.
- SARP reports were produced and published for each of the 13 crops, in close consultation with Hort Innovation.

## Results and discussion

The industry surveys were conducted between November 2023 and February 2025. In most cases the number of responses was sufficient to update the priority lists for those crops. In some cases, the number of responses was inadequate, or the responses were incomplete and did not provide sufficient opportunity to assess whether priorities had changed from previous industry consultations. In these cases, there was additional industry consultation undertaken to establish a reliable and up-to-date list of priorities. Workshops were conducted with the berry, banana, pineapple and lychee industries, and informal industry consultation was conducted with the macadamia, melon, olive and summerfruit industries.

### Online Survey Responses:

SARP	Total Responses	Regions	Comments	Survey Report
Almonds	15	Riverland, Sunraysia, Riverina, WA	Survey closed 2 Feb '24	Complete
Avocado	24	FNQ, CQ, SEQ, Central NSW, Murray Valley, Southern WA	Survey closed 22 Dec '23	Complete
Banana	15	FNQ, SEQ, N-NSW, NT	Survey closed 8 Feb '24, workshop on 12 Feb '24	Complete
Berries	46	SEQ, Yarra Valley, Northern TAS, Mid North Coast NSW, Gippsland, Adelaide Hills, FNQ	Survey closed 22 Dec '23	Complete
Lychee	1	SEQ	Extended to 30 June 24, ALGA committee consultn	N/A
Macadamia	20	Wide Bay / Burnett, Northern Rivers NSW, Mid North Coast NSW	Closed 29 Feb 24	Complete
Melons	16	FNQ, Darling Downs, SW WA, Sunraysia, Katherine	Closed 30 June 24	Complete
Olive	2	Barossa SA	Survey closed 30 June 24, alternative process used	N/A
Onion	13	SA (Murray), Northern TAS, Riverina, Swan Hill, SEQ, SWQ, SW WA, Swan Hill, Mallee	Closed 30 June 24	Complete
Papaya	6	FNQ	Closed 30 June 24	Complete
Passionfruit	11	SEQ, CQ, VIC, FNQ, N-NSW	Survey closed 2 Feb '24	Complete
Pineapple	11	SEQ, CQ, NQ, N-NSW, VIC	Closed 30 June 24	Complete
Summerfruit	19	SEQ, CW-NSW, Sunraysia, Goulburn Valley, Riverland, Mallee	Extended to 28 February 2025	Complete

SARP reports have been completed and published for thirteen industries. These reports will provide the horticulture industries with a clear indication of where the horticultural industry should pursue additional pest control options to address priority pest issues in each crop type, either through new registrations in conjunction with registrants or by obtaining minor use permits via the APVMA.

## SARP Reports Published:

SARP	Publish Date	Report Status	Size (pages)
Almonds	May 2024	Published	115
Avocado	April 2024	Published	98
Banana	May 2024	Published	130
Berries	February 2024	Published	215
Lychee	March 2025	Published	91
Macadamia	September 2024	Published	85
Melons	September 2024	Published	112
Olive	March 2025	Published	83
Onion	January 2025	Published	124
Papaya	January 2025	Published	82
Passionfruit	July 2024	Published	81
Pineapple	December 2024	Published	70
Summerfruit	June 2025	Published	165

## Outputs

The project identified and prioritised the major insect, disease and weed pests of each of the 13 crop types. It identified the current chemical control options, indicating whether there are any risks associated with the existing options eg regulatory, IPM issues, etc as well as any gaps where there are either no options currently available or there are insufficient options to provide for sustainable pest management in the short to medium term.

The project has produced:

- Eleven (11) survey reports, detailing the results from the online surveys. Survey reports were not produced for lychees and olives due to insufficient survey responses being received.
- Thirteen (13) updates SARP reports (almonds, avocado, banana, berries, lychee, macadamia, melons, olive, onion, papaya, passionfruit, pineapple, summerfruit)

## Output summary

Output	Description	Detail
Survey Reports: Almonds Avocado Banana Berries Macadamia Melons Onion Papaya Passionfruit Pineapple Summerfruit	Survey reports have been produced to inform the pest priorities that are included in the SARP reports. These reports outline feedback received from the online surveys conducted for each industry.	These survey reports are not published. They are retained as internal documents for use by Hort Innovation and in the production of SARP reports.
SARP Reports: Almonds Avocado Banana Berries Lychee Macadamia Melons Olive Onion Papaya Passionfruit Pineapple Summerfruit	SARP reports have been completed and published for thirteen industries. These reports will provide the horticulture industries with a clear indication of where the horticultural industry should pursue additional control options to address priority pest issues in each crop type.	SARP reports are published on the Hort Innovation website and are made available for industry to use in prioritizing research funding and identifying additional pest control options required for those crops.

## Outcomes

The outcomes of this project are:

- A comprehensive list of the current pesticide control options for each crop type, which will assist the industry to reference what products are registered for those uses
- A clear indication of where the horticultural industry should pursue additional pest control options to address priority pest issues in each crop type, either through new registrations in conjunction with registrants or by obtaining minor use or emergency use permits through the APVMA.
- The reports have been presented in a format that will enable easy updating of the data as new information becomes available in the future.

The project provides the various industries with a strategic outlook that directs ongoing efforts to ensure the availability of effective chemical pest control tools that contribute to a productive, profitable and competitive industry.

## Monitoring and evaluation

A monitoring and evaluation program was not required for this project.

## Recommendations

All recommendations are contained within the SARP Reports produced by the project.

## Refereed scientific publications

Not Applicable

## References

AgChem Access Priority Access Forum	<a href="https://www.agrifutures.com.au/national-rural-issues/agvet-chemicals/">https://www.agrifutures.com.au/national-rural-issues/agvet-chemicals/</a>
Australian Pesticide and Veterinary Medicines Authority	<a href="http://www.apvma.gov.au">www.apvma.gov.au</a>
APVMA Chemical review	<a href="https://apvma.gov.au/chemicals-and-products/chemical-review/listing">https://apvma.gov.au/chemicals-and-products/chemical-review/listing</a>
APVMA MRLs	<a href="http://www.legislation.gov.au/F2023L01350/latest/text">www.legislation.gov.au/F2023L01350/latest/text</a>
APVMA Permit search	<a href="http://portal.apvma.gov.au">Agricultural And Veterinary Permits Search - portal.apvma.gov.au</a>
APVMA Product search	<a href="http://portal.apvma.gov.au">Public Chemical Registration Information System Search - portal.apvma.gov.au</a>
Codex MRL database	<a href="http://www.fao.org/fao-who-codexalimentarius/codex-texts/dbs/pestres/en/">http://www.fao.org/fao-who-codexalimentarius/codex-texts/dbs/pestres/en/</a>
Cotton Pest Management Guide 2023-24	<a href="https://www.cottoninfo.com.au/publications/cotton-pest-management-guide">https://www.cottoninfo.com.au/publications/cotton-pest-management-guide</a>
CropLife Australia	<a href="https://www.croplife.org.au/">https://www.croplife.org.au/</a>
Hort Innovation	<a href="http://www.horticulture.com.au">www.horticulture.com.au</a>

## Intellectual property

No project IP or commercialisation to report

## Acknowledgements

Thanks go to the many industry people who contributed information and collaborated on the review of this report.

## Appendices

### Survey Reports:

- Almonds
- Avocado
- Banana
- Berries
- Macadamia
- Melons
- Onion
- Papaya
- Passionfruit
- Pineapple
- Summerfruit

### Published SARP Reports:

- Almonds
- Avocado
- Banana
- Berries
- Lychee
- Macadamia
- Melons
- Olive
- Onion
- Papaya
- Passionfruit
- Pineapple
- Summerfruit