ALMOND BOARD OF AUSTRALIA

Agrichemicals in almonds – Priorities and next steps

Almond Board of Australia R&D Forum 2025

Joshua Fielke, Industry Development Officer

Hort Innovation ALMOND FUND

australianalmonds.com.au

Agenda

- APVMA Review process – Spray Seed
- Strategic Agrichemical Review Process (SARP)
- Access to chemistry
- Getting the most out of existing chemistry

What is your biggest challenge when it comes to Agrichemicals?

The APVMA chemical review process

Stages of chemical review

Australian Government

Australian Pesticides and Veterinary Medicines Authority

Work Plan		+
1. Nomination	Completed	+
2. Prioritisation	Completed	+
3. Scoping and work plan	Completed	+
4. Notice of reconsideration	Completed	+
5. Assessment	Completed	+
6. Proposed regulatory decision	Completed	+
7. Consultation	Completed	+
8. Final regulatory decision	Forecasted	+
9. Implementation	Forecasted	+

APVMA Paraquat / diquat review

Uses for orchards have not been supported

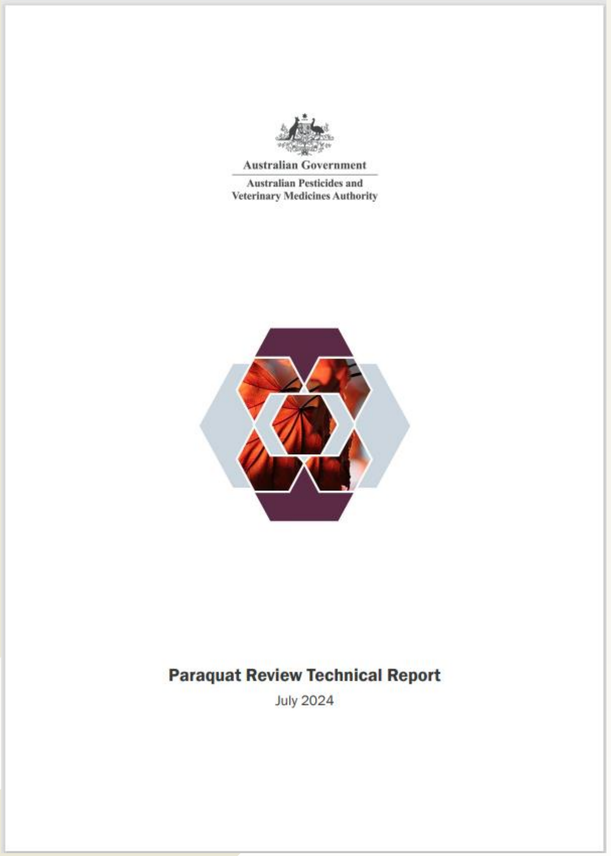


Table 29: Paraquat – Summary of risk assessment outcomes for terrestrial vertebrates

Use pattern	Situation	Rate range (g ac/ha)	Wild mammal assessment	Bird assessment	Max. seasonal rate supported (paraquat)
General weed control	Non-agricultural situations, around sheds, roadways, paths, firebreaks	390–1140	**Not supported**	**Not supported**	45 g ac/ha
	Fallow	150–2250	Acceptable up to 432 g ac/ha	Acceptable up to 231 g ac/ha	231 g ac/ha
	Orchards, vineyards	280–810	**Not supported**	**Not supported**	45 g ac/ha
	Potatoes	300–720	**Not supported**	**Not supported**	231 g ac/ha
	Lucerne, market gardens, row crops, vegetables	300–1050	**Not supported**	**Not supported**	231 g ac/ha
	Pasture[15]	100–600	**Not supported**	**Not supported**	45 g ac/ha
	Bananas	175–1120	Acceptable up to 432 g ac/ha	Acceptable up to 231 g ac/ha	231 g ac/ha
	Hops, sugarcane	300–420	Acceptable risk	**Not supported**	231 g ac/ha
	Rice	200–420	Acceptable risk	Acceptable up to 231 g ac/ha	231 g ac/ha
	Peanuts	100–250	Acceptable risk	Acceptable up to 231 g ac/ha	231 g ac/ha
	Spray topping in pulses	100–200	Acceptable up to 149 g ac/ha	Acceptable risk	149 g ac/ha

APVMA Paraquat / diquat review

Uses for orchards have not been supported

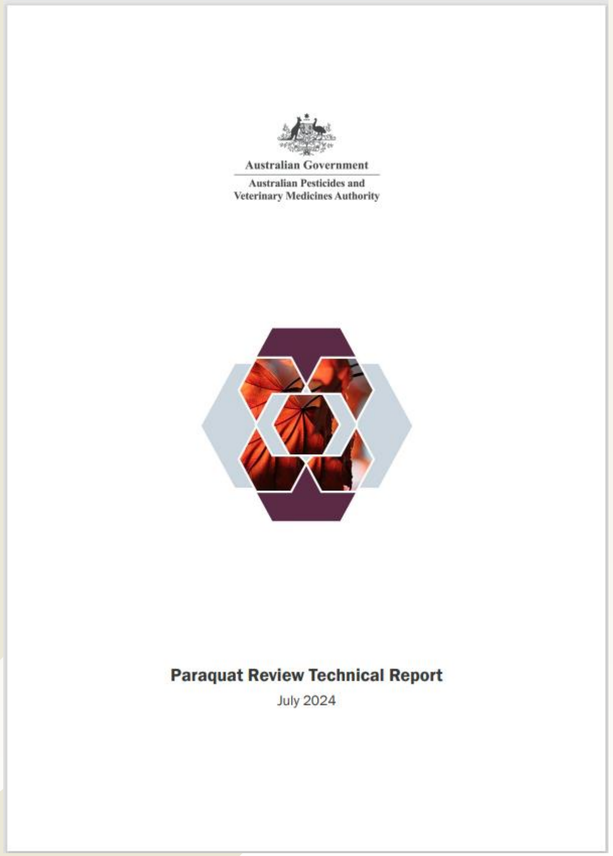


Table 29: Paraquat – Summary of risk assessment outcomes for terrestrial vertebrates

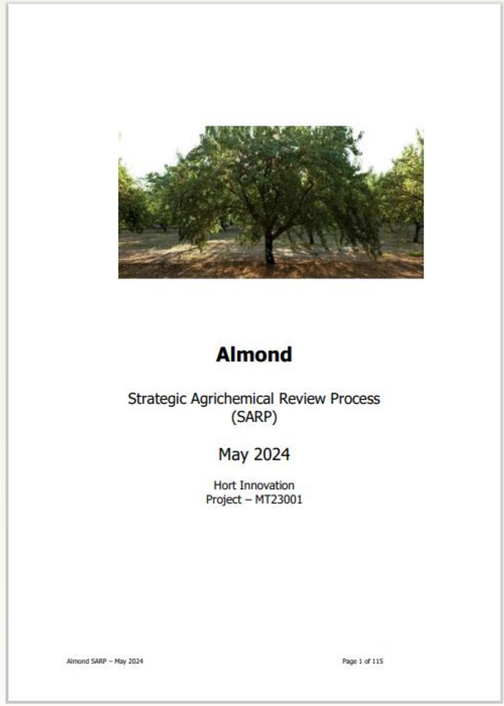
Use pattern	Situation	Rate range (g ac/ha)	Wild mammal assessment	Bird assessment	Max. seasonal rate supported (paraquat)
General weed control	Non-agricultural situations, around sheds, roadways, paths, firebreaks	390–1140	**Not supported**	**Not supported**	45 g ac/ha
	Fallow	150–2250	Acceptable up to 432 g ac/ha	Acceptable up to 231 g ac/ha	231 g ac/ha
	Orchards, vineyards	280–810	**Not supported**	**Not supported**	45 g ac/ha
	vegetables				
	Pasture[15]	100–600	**Not supported**	**Not supported**	45 g ac/ha
	Bananas	175–1120	Acceptable up to 432 g ac/ha	Acceptable up to 231 g ac/ha	231 g ac/ha
	Hops, sugarcane	300–420	Acceptable risk	**Not supported**	231 g ac/ha
	Rice	200–420	Acceptable risk	Acceptable up to 231 g ac/ha	231 g ac/ha
	Peanuts	100–250	Acceptable risk	Acceptable up to 231 g ac/ha	231 g ac/ha
	Spray topping in pulses	100–200	Acceptable up to 149 g ac/ha	Acceptable risk	149 g ac/ha

280–810 Not supported Not supported 45 g ac/ha

Strategic Agrichemcial Review Process

Introduction

- Identify gaps in the industry's agrichemical profile to inform registrations and minor use permits.
- All noted diseases are assessed in this process.



ALMOND BOARD OF AUSTRALIA

australianalmonds.com.au

Strategic Agrichemcial Review Process

Outcomes

- Industry survey prioritises pests.
- All pests are assessed against available agrichemicals.
- Guiding permit applications and business case decisions.

1.1 Diseases

The high priority diseases are:

Disease	Priority
Hull Rot (*Rhizopus* spp.)	H
Almond Rust (*Tranzschelia discolor*)	H
Bacterial Leaf Spot (*Xanthomonas arboricola*)	H
Anthracnose (*Colletotrichum gloeosporioides*)	H

1.2 Insects and other pests

The high priority insects and other pests are:

Insects and Other Pests	Priority
Carob Moth (*Ectomyelois ceratoniae*)	H
Carpophilus Beetle (*Carpophilus* spp.)	H

1.3 Weeds

The high priority weeds are:

Weeds	Priority
Flaxleaf Fleabane (*Conyza bonariensis*)	H
Annual Ryegrass (*Lolium rigidum*)	H

1.4 Plant Growth Regulators

The high priority Plant Growth Regulator issues are:

PGR Issue	Priority
Promote nut loosening	H

Strategic Agrichemcial Review Process

What does industry do with this?

- Emergency use permits
- Minor use permits
- Product registrations

Minor use permits

What’s required

1. What is a minor use

A minor use can include:

- Use of a product on a speciality crop or animal grown on a small scale
- Infrequent use of a product on a major crop for the control of a minor pest or disease
- Use of a product on a major crop for the control of a minor pest or disease, where the use is restricted to a small proportion of that crop
- Change in use of a registered product (that would normally require an application for variation) to account for unusual seasonal conditions (for example, changes to the method or rate of application of the product)
- Use of a product on a newly emerging crop or livestock species

Minor use permits

What's required

Table 3: Classification of minor uses based on treatment volume and value of commodity

		Area/number of plants/number of animals to be treated (per annum)		
		Low	**Medium**	**High**
Value of commodity	**Low**	Minor	Minor	More information required
	Medium	Minor	More information required	More information required
	High	Minor	More information required	Potentially major use – **must** demonstrate insufficient economic return

Table 4: Classification of area and value for various commodities

	Low	Medium	High
Horticulture			
Area	<1,000 ha	1,000–5,000 ha	>5,000 ha
Number of trees	<50,000	50,000–1 million	>1 million +
Value	<$10 million	$10–75 million	>$75 million

Minor use permits

What's required

Table 3: Classification of minor uses based on treatment volume and value of commodity

		Area/number of plants/number of animals to be treated (per annum)		
		Low	**Medium**	**High**
Value of commodity	**Low**	Minor	Minor	More information required
	Medium	Minor	More information required	More information required
	High	Minor	More information required	Potentially major use – **must** demonstrate insufficient economic return

- Scale of use
- Not commercially viable to register
- SARP recommendation
- Lack of availability / registrations of alternative products

Business case for new products

Ongoing discussions

- ABA Chemical subcommittee – How can industry support this process?
- Discussions with AgChem Companies

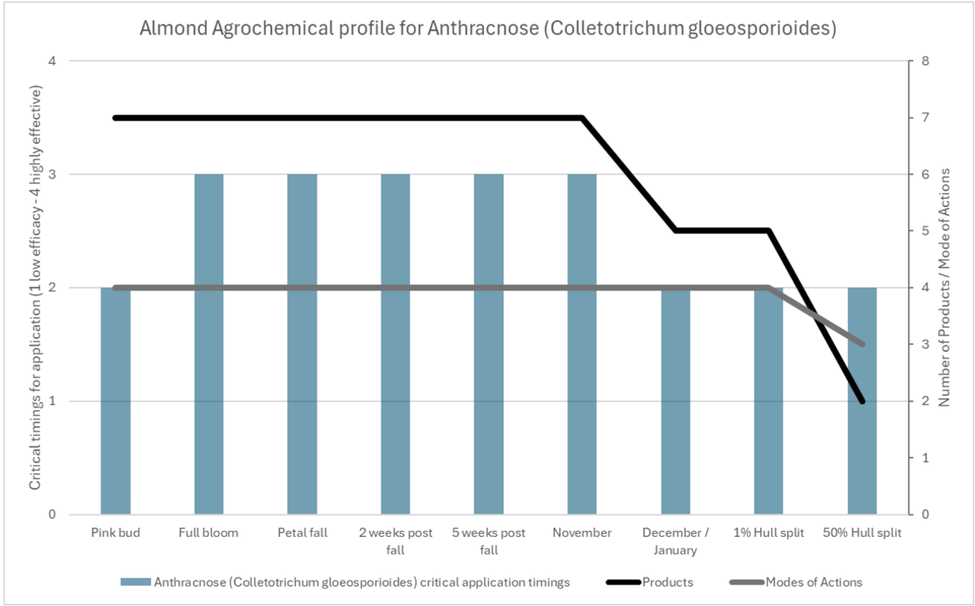
4) Anthracnose (Colletotrichum gloeosporioides)

SARP - Rated as a high priority in NSW, VIC & WA, and as a low priority in SA. Anthracnose attacks the flowers, fruit and stems. It results in lesions on the surface of nut which can develop and infest the whole nut. Affected nuts turn into mummies and stick to the tree. Cultural measures that reduce canopy humidity will assist along with a regular fungicide program.

There has been a raise in reports of anthracnose over the last few years, especially in the riverina and on Monterey.

Product list (Regulatory risk – Short, Med, Long term)
Fluopyram + Tebuconazole (Luna Experience)
Fluopyram + Trifloxystrobin (Luna Sensation)
Isopyrazam (Seguris)
Pyraclostrobin + Fluxapyroxad (Merivon)
Azoxystrobin (Amistar)
Captan
Propiconazole PER12989

Available mode of actions	Single form	Dual MOA
3	1	1
7	1	3
11	1	2
M4	1	



ALMOND BOARD OF AUSTRALIA

Business case for new products

I need the growers help!

Two key questions:

What is your biggest challenge on farm?

How many times a year do you spray for priority pests?

ALMOND BOARD OF AUSTRALIA

australianalmonds.com.au

How many applications per year do you do for....

Getting the most out of what we have

Key points

- Understand your TAP! Target, Agrochemicals and Purpose
- Rotate / Combine compatible mode of actions
- Get advice from registrants if having issues with control

Getting the most out of what we have

Rotation

Modes of actions that are susceptible to resistance:

7's

11's

Getting the most out of what we have

Rotation

Modes of actions that are susceptible to resistance:

Guidelines

1. **Do not** apply consecutive sprays of products containing **Group 7** or **11**. Consecutive sprays include mixtures containing **Group 7** or
2. **Do not** apply more than three **Group 2** sprays in one season. Apply no more than two consecutive sprays before changing to another group.
3. Consecutive application includes from the end of one season to the start of the following season.
4. The spray program should be considered and the strategy applied on a whole-orchard basis.

Summary

- Spray seed decision made in late 2025 – potential 2 year phase out
- Understand your TAP! Target, Agrochemicals and Purpose
- Rotate / Combine compatible mode of actions
- Get advice from registrants if having issues with control
- If passionate apply to be on the Chemical Subcommittee