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Prune and Dried Tree Fruit

Strategic Agrichemical Review Process
(SARP)

October 2026

Hort Innovation
Project – MT25005

¹ Image source <https://ausprunes.org.au/>

SARP Service Provider:

AGK Services

Purpose of the report:

This report was funded by Hort Innovation to investigate the pest problem, agrichemical usage and pest management alternatives for the prune and dried tree fruit industry across Australia. The information in this report will assist the industry with its agrichemical selection and usage into the future.

Date of report:

October 2026

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**Hort
Innovation** **DRIED TREE
FRUIT FUND**

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1. Summary

A Strategic Agrichemical Review Process (SARP), through the process of a desktop audit and industry liaison;

- (i) Assesses the importance of the diseases, insects and weeds (plant pests) that can affect a horticultural industry;
- (ii) Evaluates the availability and effectiveness of fungicides, insecticides and herbicides (pesticides) to control the plant pests;
- (iii) Determines any gaps in the pest control strategy and
- (iv) Identifies suitable new or alternatives pesticides to address the gaps.

Alternative pesticides should ideally be selected for benefits of:

- Integrated Pest Management (IPM) compatibility
- Improved scope for resistance management
- Sound biological profile
- Residue and trade acceptance domestically and for export

The results of this process will provide the prune and dried tree fruit industry 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).

1.1 Diseases

The high priority diseases are:

Common name	Scientific name
Blossom Blight / Brown Rot	<i>Monilinia</i> spp.
Rust	<i>Tranzschelia discolor</i>

1.2 Insects and Mites

The high priority insects and mites are:

Common name	Scientific name
Queensland Fruit Fly	<i>Bactrocera tryoni</i>
Mediterranean Fruit Fly	<i>Ceratitis capitata</i>
Two Spotted Mite	<i>Tetranychus urticae</i>
Bryobia Mite	<i>Bryobia rubrioculus</i>

1.3 Weeds

The high priority weeds are:

Common Name	Scientific Name
Flaxleaf Fleabane	<i>Conyza bonariensis</i>
Wireweed	<i>Polygonum aviculare</i>
Caltrop	<i>Tribulus terrestris</i>
Nutgrass	<i>Cyperus rotundus</i>

2. The Australian Prune and Dried Tree Fruit Industry

The Australian prune and dried tree fruit industry is a minor horticultural industry. Prunes are grown in NSW and Victoria, with the majority of production centred on Griffith, NSW. Other dried tree fruit includes apple, apricot, nectarine and peach, with most production occurring in Victoria, particularly the Goulburn Valley and Sunraysia.

Prune production for the year ending June 2025² was 10,000 tonnes (fresh weight) with a value of \$3.7 million at farm gate. Processed total volume was 3,000 tonnes, with 2,588 tonnes (86%) supplied to the domestic market and 412 tonnes (14%) exported. Production has been growing strongly in recent years.

Prune Seasonality by State

State	24/25 Tonnes	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
New South Wales	9,600												
Victoria	400												
Availability Legend			High		Medium		Low						

Australia is a net importer of prunes. For the year ending June 2025, Australia exported 412 tonnes of prunes. Of this export, 85.0% was destined for China, followed by New Zealand (9.2%), Chile (4.9%), Fiji (0.5%) and Singapore (0.3%).

Other dried tree fruit production for the year ending June 2025² was 1,252 tonnes (fresh weight) with a value of \$0.3 million at farm gate. Processed total volume was 376 tonnes, with 140 tonnes (37%) supplied to the domestic market and 236 tonnes (63%) exported. Production volumes have been declining in recent years.

Australia is a net importer of other dried tree fruit. Specific export data is not available.

The scope of this SARP report is restricted to prunes, peaches and apricots which are all varieties of stone fruit (summerfruit). Other types of dried tree fruit are excluded.

² Hort Innovation (2026). Australian Horticulture Statistics Handbook 2024/25. [online] Available at: <https://www.horticulture.com.au/growers/help-your-business-grow/research-reports-publications-fact-sheets-and-more/australian-horticulture-statistics-handbook/>

3. Introduction

3.1 Background

Growers of some horticultural crops suffer from a lack of legal access to crop protection products (pesticides). The problem may be that whilst a relatively small crop area is valuable in an agricultural sense, it may not be of sufficient size for agrichemical companies to justify the expense of registering a product use on that crop. Alternately, the disease, pest, or weed problem may be regional or spasmodic, making Agrichemical companies unwilling to bear the initial high cost of registering suitable pesticides.

Growers may face severe losses from diseases, pests and weeds due to a lack of registered or approved (via a permit) chemical control tools. Environmental concerns, consumer demands, and public opinion are also significant influences in the marketplace related to pest management practices. Industry IPM practitioners must strive to implement best management practices and tools to incorporate a pest management regime where strategies work in harmony with each other to achieve the desired effects while posing the least risks.

In combination with cultural practices, pesticides are important tools in prune and dried tree fruit production and respective IPM programs. They control the various diseases, insects and weeds that affect the crop and can cause severe economic loss in modern high intensity growing operations. Pesticides are utilised during establishment and development, and to maximise quality and customer appeal.

As a consequence of the issues facing the prune and dried tree fruit industry regarding pesticide access, Hort Innovation undertook a review of the pesticide requirements via a Strategic Agrichemical Review Process (SARP) in 2019. The current project is to update the SARP with the latest information and progress.

The SARP identifies diseases, insect pests and weeds of major concern to the prune and dried tree fruit industry. Against these threats, available registered or permitted pesticides are evaluated for overall suitability in terms of IPM, resistance, efficacy, trade, human safety and environmental issues. Where tools are unavailable or unsuitable the process aims to identify potential future solutions. Potential new risks to the industry are also identified.

The results will provide the prune and dried tree fruit industry with a clear outlook of gaps in existing pest control options. This report is not a comprehensive assessment of ALL pests and control methods used in prune and dried tree fruits but attempts to prioritise the major problems.

Exotic plant pests, not present in Australia, are not addressed in this document. Biosecurity information for the summerfruit industry is available at the Summerfruit Australia website³. This covers prune and dried tree fruit and outlines key threats to the industry, risk mitigation plans, identification and categorisation of exotic pests and contingency plans. High priority exotic pests have been assessed based on their potential to enter, establish, and spread in Australia (e.g. environmental factors, host range, vectors) and the cost to industry of control measures.

³ <https://summerfruit.com.au/growers/biosecurity/>

3.2 Minor use permits and registration

The dried tree fruits considered in this report all belong to the crop group stone fruit. Products registered or permitted in stone fruit can be used in prunes and other dried stone fruit crops unless the label specifically excludes use in dried fruits. Maximum Residue Limits (MRLs) may not be set in specific dried fruits for all products.

From a pesticide access perspective, the APVMA classifies stone fruit as a major crop. The crop fits within the APVMA crop group 3: stone fruits. Prunes belong to subgroup 3B: Plums and dried peaches and nectarines belong to subgroup 3C: Peaches. Access to minor use permits can be quite complex given the crop status as a major crop. Reasonable justification is required for minor use permits, in accordance with the APVMA's minor use guidance⁴.

Possible justification for future permit applications could be based on:

- Minor use within a major crop
- New disease, insect or weed identified as a cropping issue
- No pesticide approved for the problem
- Insufficient options for resistance management
- Current pesticides ineffective due to resistance
- Trade risk - current pesticides unsuitable where crop commodities will be exported
- IPM, environment or OH&S issues
- Loss of pesticides due to removal from market or chemical review restrictions
- Opportunity to extrapolate a use pattern when a new, effective pesticide is registered in another crop
- Alternate pesticide has overseas registration or minor use permit
- Market failure – insufficient return on investment for registrant.

With each of these options, sound, scientific argument is required to justify any new permit applications. Another option for the prune and dried tree fruit industry is for manufacturers to register new pesticides uses in the crop.

⁴ <https://apvma.gov.au/node/10931>

3.3 Methods

The current update of the Prune and Dried Tree Fruit Strategic Agrichemical Review Process (SARP) was conducted by desktop audit. The process included gathering, collating and confirming information:

Reference	Process of Review - Activity
Pest Priorities	Engagement and consultation with growers and other relevant stakeholders. Including; Online crop specific surveys Collation of information collected by commodity on applicable pests, diseases and weeds in order of priority.
MT24008 – Regulatory Support & Response Co-ordination (pesticides) DTS Pty Ltd	Prune and Dried Tree Fruit Agrichemical Regulatory Risk Assessment Document To assist strategic planning, with respect to future pest management options, this document was developed as part of the Hort Innovation funded project MT24008 to highlight the regulatory threats to agrichemicals currently approved for the management of the pests and diseases in prune and dried tree fruit as well as current initiatives aimed at addressing identified pest management deficiencies.
Strategic Agrichemical Review Process (SARP)	SARP updated via a desktop audit: Review list of priorities rated as high, moderate and low for each plant pest groups (disease, insects and weeds) Identify industries pest priority gaps in order of importance Update current pesticides available via label registrations or minor use permits Update available pesticide use patterns, IPM ranking/compatibility, mode of action and chemical group. Identify pesticides at risk (under review and/or limited uses) via MT24008 Regulatory Support & Response Co-ordination (pesticides) – DTS Pty Ltd. Identify any 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). Include known pesticide solutions that are currently under development with registrants for new uses in the nominated crops or in current Hort Innovation projects. Update MRL tables to include Australian MRL's, Codex and any applicable export market MRL's

3.4 Results and discussions

3.4.1 Detail

Results and discussions are presented in the body of this document.

3.4.2 Appendices

Refer to additional information in the appendices:

Appendix 1. Products available for disease control in prune and dried tree fruit

Appendix 2. Products available for control of insects and mites in prune and dried tree fruit

Appendix 3. Products available for weed control in prune and dried tree fruit

Appendix 4. Current permits for use in prune and dried tree fruit

Appendix 5. Prune and dried tree fruit Maximum Residue Limits (MRLs)

Appendix 6. Prune and dried tree fruit Agrichemical Regulatory Risk Assessment

4. Diseases, Pests and Weeds of Prune and Dried Tree Fruit

Resistance management: To manage the risk of resistance development, integrated disease/pest/weed management (IDM/IPM/IWM) strategies should be adopted. The general principle is to integrate diverse chemical and non-chemical strategies; maximise efficacy; not rely on singular tools; and rotate between different modes of action. It is always essential to follow all the label and permit instructions. Specific resistance management strategies may apply. These can be found, along with other useful information, on the CropLife Australia website⁵.

In Chapter 4 information on regulatory risk derived from project MT24008 (Regulatory support and response coordination) has been incorporated.

Some of the suggested options have no overseas MRLs (see Appendix 5). Some importing countries may defer to MRLs established by the Codex Alimentarius Commission (Codex MRLs) but this cannot be automatically assumed.

While care has been taken to ensure the accuracy of the information provided in this document, the APVMA registered label and where relevant the APVMA approved permit must always be followed.

⁵ <https://www.croplife.org.au/resources/programs/resistance-management/>

4.1 Diseases of prune and dried tree fruit

4.1.1 Disease priorities

Common name	Scientific name
High	
Blossom Blight / Brown Rot	<i>Monilinia</i> spp.
Rust	<i>Tranzschelia discolor</i>
Moderate	
Shot-Hole	<i>Wilsonamyces carpophilus</i>
Freckle and Scab	<i>Venturia carpophila</i> , (anamorph <i>Cladosporium carpophilum</i>)
Bacterial Spot	<i>Xanthomonas arboricola</i>
Bacterial Canker	<i>Pseudomonas syringae</i>
Root Rot / Collar Rot	<i>Phytophthora</i> spp.
Silver Leaf	<i>Chondrostereum purpureum</i>
Low	
Crown Gall	<i>Agrobacterium tumefaciens</i>
Leaf Curl	<i>Taphrina deformans</i>
Armillaria Root Rot	<i>Armillaria mellea</i>

The high priority diseases across the prune and dried tree fruit industries are Blossom Blight / Brown Rot and Rust. Available and potential products for controlling diseases of prunes and dried tree fruit are listed in Section 4.1.2. It is recommended that an Integrated Disease Management Strategy is implemented, including a range of cultural practices to support fungicides, and potentially reduce the reliance on fungicides for disease control.

Cultural controls include:

- Biosecurity measures to prevent importing infections from other farms.
- Promoting good drainage and avoid waterlogging through irrigation.
- Farm hygiene – remove dead plant material that could contain disease inoculum.
- Avoid crop stress through good nutrition and water management.

Regular use of protectant fungicides is usually required for control of in-crop diseases as well as preventing infections that can manifest post-harvest. In controlling fungal and bacterial diseases, the industry should be mindful of resistance management. In addition to cultural controls, it is important to include a range of fungicide groups in a foliar spray program, including the use of protectant fungicides. Fungicide programs should be planned at the start of the season to ensure that effective disease control is achieved in conjunction with appropriate product rotation.

Resistance Management

CropLife Australia have resistance management strategies related to the control of diseases on the CropLife website⁶. Growers should review these strategies and implement management plans for fungicides that will reduce the risk of resistance development.

⁶ www.croplife.org.au/resources/programs/resistance-management/

4.1.2 Available and potential products for priority diseases

TABLE KEY: Note that blank fields in the table indicate no information has been provided.

Availability		Regulatory risk (refer to Appendix 6)	
A	Available via either registration or permit approval	R1	Short-term risk: Critical concern over retaining access < 1 year
P	Potential - a possible candidate to pursue for registration or permit	R2	Medium-term risk: Maintaining access of significant concern <2-5 years
P-A	Potential, already approved in the crop for another use	R3	Long-term: Potential issues associated with use - Monitoring required < 5 years
		R4	No current risk / concerns
Withholding Period (WHP) – Number of days from last treatment to harvest (H) or Grazing (G)			
Harvest	H	Not Required when used as directed	NR
Grazing	G	No Grazing Permitted	NG

Disease / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Regulatory risk
Blossom Blight / Brown Rot (<i>Monilinia</i> spp.) Priority: High Blossom Blight / Brown Rot is rated as a high priority in VIC, and as a moderate priority in SA and NSW. Blossom Blight reduces fruit set by infecting and killing blossoms. Brown Rot attacks fruit either on the tree or after harvest. Good orchard sanitation should be used to reduce the incidence of Blossom Blight and Brown Rot. A protective fungicide program should be used if conditions are favourable for disease and if the orchard has a history of infections.							
BLAD (Problad Verde)	BM01	Biological	NR	A	ALL	Registered in stone fruit for control of Brown Rot (<i>Monilinia</i> spp.) and suppression of Blossom Blight (<i>Monilinia</i> spp.) For Blossom Blight, apply as a foliar application prior to disease development during flowering at pink, white or red bud. Make a second application at full bloom and if conditions remain favourable for disease, make another application at petal fall. For Brown Rot, make foliar applications during the month before harvest using a retreatment interval of 7-14 days. Maximum number of applications per season not specified.	R4
Captan	M4	Protectant	7 G:7	A	ALL	Registered in stone fruit (except apricots) for control of Blossom Blight & Brown Rot (<i>Sclerotinia laxa</i> , <i>S. fructicola</i>). Apply as a foliar spray at any of the following stages: pink bud, 10% blossom, full bloom, petal fall, shuck fall and pre-harvest applications at 6, 3 and 1 week prior to harvest. Retreatment interval not specified. Maximum of 5 applications per season.	R4

Disease / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Regulatory risk
Chlorothalonil (Bravo)	M5	Protectant	7	A	ALL	Registered in apricots for control of Brown Rot - Fruit (<i>Monilinia fructicola</i>), Blossom Blight (<i>Monilinia laxa</i>) Shot-Hole (<i>Stigmina carpophila</i>), Stone Fruit Rust (<i>Tranzschelia discolor</i>) and Freckle (<i>Ventura carpophila</i>). Apply as a foliar spray at bud-swell, bud burst, pink bud and full bloom. Apply no later than 35 days pre-harvest as unacceptable skin damage may occur. Retreatment interval and maximum number of applications per season not specified.	R2
			1			Registered in nectarines for control of Shot-Hole (<i>Stigmina carpophila</i>), Brown Rot - Fruit (<i>Monilinia fructicola</i>) and Blossom Blight (<i>Monilinia laxa</i>). Apply as a foliar spray at bud-swell, bud burst, pink bud, early blossom and full bloom. Apply no later than 35 days pre-harvest as unacceptable skin damage may occur. Retreatment interval and maximum number of applications per season not specified. Registered in peaches for control of Brown Rot - Fruit (<i>Monilinia fructicola</i>), Blossom Blight (<i>Monilinia laxa</i>), Shot-Hole (<i>Stigmina carpophila</i>), Stone Fruit Rust (<i>Tranzschelia discolor</i>) and Leaf Curl (<i>Taphrina deformans</i>). Apply as a foliar spray at bud-swell, pink bud, early blossom and full bloom. Apply no later than 35 days pre-harvest as unacceptable skin damage may occur. Retreatment interval and maximum number of applications per season not specified. Registered in plums for control of Brown Rot - Fruit (<i>Monilinia fructicola</i>), Blossom Blight (<i>Monilinia laxa</i>), Shot-Hole (<i>Stigmina carpophila</i>) and Stone Fruit Rust (<i>Tranzschelia discolor</i>). Apply as a foliar spray at bud-swell, bud burst, pink bud, early blossom and full bloom. Apply no later than 35 days pre-harvest as unacceptable skin damage may occur. Retreatment interval and maximum number of applications per season not specified.	
Copper	M1	Protectant	1	A	ALL (excl. QLD)	Registered in stone fruit for control of Blossom Blight , Freckle, Rust, Leaf Curl and Shot Hole. Apply as a foliar spray from late budswell to early blossom. Retreatment interval and maximum number of applications per season not specified.	R4

Disease / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Regulatory risk
Cyprodinil (Chorus, Solaris)	9	Protectant & Curative	NR	A	ALL	Registered in apricots, nectarines, peaches and plums for control of Blossom Blight (<i>Monilinia laxa</i>) and Brown Rot (<i>Monilinia fructicola</i>). Apply as a foliar spray between early blossom and shuck fall. Retreatment interval not specified. Maximum of 3 applications per season.	R4
Dithianon (Delan)	M9	Protectant	21	A	ALL (excl. WA)	Registered in apricots, nectarines, peaches, plums and prunes for control of Brown Rot (<i>Monilinia fructicola</i>). Apply as a foliar spray according to local recommendations or at budswell, full bloom, petal fall, shuck fall and at 3 weeks before harvest. Maximum number of applications per season not specified.	R4
Dodine (Syllit)	U12	Protectant & Curative	NR NG	A	ALL	Registered in peaches and nectarines for control of Peach Leaf Curl (<i>Taphrina deformans</i>) and Blossom Blight (<i>Monilinia</i> spp.) Apply as a foliar spray at bud swell, early bloom and petal fall. Do not apply after petal fall. Retreatment interval and maximum number of applications per season not specified.	R4
Fluopyram + Trifloxystrobin (Luna Sensation) Bayer	7+11	Protectant & Curative	1 NG	A	ALL	Registered in stone fruit for control of Blossom Blight , Shot-Hole and Brown Rot . Apply as a foliar spray, targeting early blossom, full bloom and petal / shuck fall for Blossom Blight and from fruit ripening onwards for Brown Rot. Use a retreatment interval of 7- 10 days. Maximum of 2 applications per season.	R4
Iprodione (Rovral)	2	Protectant & Curative	NR	A	ALL	Registered in stone fruit for control of Blossom Blight (<i>Monilinia laxa</i>) and Brown Rot (<i>Monilinia fructicola</i>). Apply as a foliar spray, targeting 10% blossom, full bloom and petal / shuck fall for Blossom Blight, and at 3 and 1 weeks prior to harvest for Brown Rot. Retreatment interval not specified. Do not apply more than 2 consecutive applications.	R4
Mancozeb	M3	Protectant	14	A	ALL	Registered in stone fruit for control of Brown Rot , Rust, Shot Hole and Freckle. Apply as a foliar spray at early bloom, at mid-full bloom, at petal fall and at shuck fall. Continue with a protectant program using a retreatment interval of 14 days. Maximum number of applications per season not specified.	R2

Disease / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Regulatory risk
Mandestrobin (Intuity) Sumitomo	11	Protectant & Curative	7 G:7	A	ALL	Registered in stone fruit for control of Blossom Blight (<i>Monilinia laxa</i>) and Brown Rot (<i>Monilinia fructicola</i>). Apply as a foliar spray, targeting 20% and 90% flowering for Blossom Blight, and at 3 weeks and 1 week prior to harvest for Brown Rot. Retreatment interval not specified. Maximum of 2 applications per season.	R4
Penthiopyrad (Fontelis) Corteva	7	Protectant	NR NG	A	ALL	Registered in stone fruits for control of Brown Rot / Blossom Blight (<i>Monilinia</i> spp.) and Scab / Freckle (<i>Cladosporium carpophilum</i> , <i>Venturia carpophila</i>). Apply as a foliar spray commencing prior to disease development. Use a retreatment interval of 7-14 days. Maximum of 3 applications per season, with no more than 2 sequential applications.	R4
Potassium Bicarbonate (EcoCarb Plus)	M2	Protectant	NR	A	ALL	Registered in nectarines for control of Brown Rot (<i>Monilinia fructicola</i> , <i>M. laxa</i>). Apply as a foliar spray commencing at first sign of disease. Use a retreatment interval of 7 days. Maximum number of applications per season not specified.	R4
Procymidone (Sumisclex)	2	Protectant & Curative	9	A	ALL	Registered in stone fruit for control of Blossom Blight (<i>Monilinia laxa</i>). Apply as a foliar spray at 10% blossom, full bloom, late petal and shuck fall. Retreatment interval and maximum number of applications per season not specified.	R4
Propiconazole	3	Protectant & Curative	1	A	ALL	Registered in stone fruit for control of Brown Rot / Blossom Blight (<i>Monilinia laxa</i> , <i>Monilinia fructicola</i>). Apply as a foliar spray, targeting early blossom, full bloom and shuck fall for Blossom Blight, and at 3 weeks and 1 week before harvest for Brown Rot. Maximum of 2 consecutive applications, total number of applications per season not specified.	R3
Sulfur	M2	Protectant	NR	A	ALL	Registered in peaches, nectarines and plums for control of Brown Rot (<i>Monilinia fructicola</i>) and Blossom Blight (<i>Monilinia laxa</i>). Apply as a foliar spray commencing at petal fall. Use a retreatment interval of 21-28 days. Maximum number of applications not specified.	R4
Thiram	M3	Protectant	7	A	ALL	Registered in stone fruits for control of Brown Rot – Fruit (<i>Monilinia fructicola</i>) and Shot-Hole (<i>Stigmia carpophila</i>). Apply as a foliar spray at early full bloom, after bud swell copper sprays, at petal fall, shuck fall and then as required depending on conditions using a retreatment interval of 21-28 days. Maximum number of applications per season not specified.	R2

Disease / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Regulatory risk
Triforine (Saprol)	3	Protectant & Curative	NR	A	ALL	Registered in peaches, nectarines, apricots, plums and prunes for control of Blossom Blight (<i>Monilinia</i> spp.) and Brown Rot (<i>Monilinia</i> spp.) Apply as a foliar spray, targeting early blossom, early petal and shuck fall for Blossom Blight, and at 5, 3 and 1 week before harvest for Brown Rot. Maximum number of applications per season not specified.	R4
Ziram	M3	Protectant	7	A	ALL	Registered in nectarines and peaches for control of Blossom Blight (<i>Monilinia laxa</i>), Brown Rot (<i>Monilinia fructicola</i>), Shot-Hole (<i>Stigmata carpophila</i>), Leaf Curl (<i>Taphrina deformans</i>) and Freckle (<i>Venturia carpophila</i>). Apply as a foliar spray at mid full bloom, early petal fall and at shuck fall, and after fruit starts to ripen using a 14 day retreatment interval. Maximum number of applications per season not specified.	R2
<i>Bacillus amyloliquefaciens</i> strain QST713 (Serenade Opti) Bayer	BM02	Biological	NR	P		Registered for control of Botrytis in grapevines and strawberries, Anthracnose and Stem End Rot in avocado and other tropical fruits (excluding banana), and suppression of Bacterial Spot in tomatoes, capsicums and chillies. US registration for control of Blossom Blight / Brown Rot in stonefruit.	R4
<i>Bacillus amyloliquefaciens</i> (Serifel) BASF	BM02	Biological	NR	P		Registered for control of Botrytis in grapevines and berries. US registration for control of Blossom Blight / Brown Rot in stonefruit.	R4
Florypicoxamid (Verpico Adavelt) Corteva	21	Protectant		P		Registered for control of Powdery Mildew in cucurbits and fruiting vegetables, control of Sclerotinia Rot in lettuce, and control of Grey Mould and Powdery Mildew in strawberries. Also has activity on Septoria, Anthracnose, Alternaria, Scab, Monilinia , Rust and <i>Mycosphaerella</i> spp.	R4
Fluxapyroxad + Pyraclostrobin (Merivon) BASF	7+11	Protectant & Curative		P		Registered in almonds for control of Alternaria Leaf Spot, Black Spot, Brown Rot , Nut Scab, Shot-Hole and Stone Fruit Rust. US registration for control of Blossom Blight / Brown Rot in stone fruit.	R4
Mefentrifluconazole (Belanty) BASF	3	Protectant & Curative		P		Registered for control of Black Spot in apples and Powdery Mildew in grapes. US registration for control of <i>Alternaria</i> , Monilinia , <i>Tranzschelia</i> and <i>Wilsonomyces</i> in stone fruit.	R4

Disease / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Regulatory risk
Pydiflumetofen + Difenconazole (Miravis Duo) Syngenta	7+3	Protectant & Curative		P		Registered for control of various diseases in fruiting vegetables, cucurbits. Root vegetables, celery and peanuts. US registration for control of Blossom Blight / Brown Rot in stonefruit.	R3
Pydiflumetofen + Fludioxonil (Miravis Prime) Syngenta	7+12	Protectant & Curative		P		Registered for control of various diseases in grapes, berries, leafy vegetables, lettuce and potatoes. US registration for control of Monilinia spp. in bushberries.	R4
Rust (Tranzschelia discolor) Priority: High Rust is rated as a high priority in NSW, and as a low priority in VIC and SA. Severe rust infections can lead to premature leaf fall and considerable reduction of yield. Fruit infected with rust is unsaleable.							
Chlorothalonil (Bravo)	M5	Protectant	7	A	ALL	Registered in apricots for control of Brown Rot - Fruit (<i>Monilinia fructicola</i>), Blossom Blight (<i>Monilinia laxa</i>), Shot-Hole (<i>Stigmata carpophila</i>), Stone Fruit Rust (<i>Tranzschelia discolor</i>) and Freckle (<i>Venturia carpophila</i>). Apply as a foliar spray at bud-swell, bud burst, pink bud, shuck fall and cap fall, and then on a retreatment interval of 10-14 days. Apply no later than 35 days pre-harvest as unacceptable skin damage may occur. Maximum number of applications per season not specified.	R2
						Registered in peaches for control of Brown Rot - Fruit (<i>Monilinia fructicola</i>), Blossom Blight (<i>Monilinia laxa</i>), Shot-Hole (<i>Stigmata carpophila</i>), Stone Fruit Rust (<i>Tranzschelia discolor</i>) and Leaf Curl (<i>Taphrina deformans</i>). Apply as a foliar spray at bud-swell and continue at a retreatment interval of 7-14 days. Apply no later than 35 days pre-harvest as unacceptable skin damage may occur. Maximum number of applications per season not specified.	
			1			Registered in plums for control of Brown Rot - Fruit (<i>Monilinia fructicola</i>), Blossom Blight (<i>Monilinia laxa</i>), Shot-Hole (<i>Stigmata carpophila</i>) and Stone Fruit Rust (<i>Tranzschelia discolor</i>). Apply as a foliar spray at bud-swell, bud burst, shuck fall and cap fall. Retreatment interval and maximum number of applications per season not specified.	

Disease / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Regulatory risk
Copper	M1	Protectant	1	A	ALL (excl. QLD)	Registered in stone fruit for control of Blossom Blight, Freckle, Rust , Leaf Curl and Shot Hole. Apply as a foliar spray from late budswell to early blossom. Retreatment interval and maximum number of applications per season not specified.	R4
Dithianon (Delan)	M9	Protectant	21	A	ALL	Registered in nectarines and peaches for control of Leaf Curl (<i>Taphrina deformans</i>) and Rust (<i>Uromyces</i> spp.) and in plums for control of Rust (<i>Uromyces</i> spp.) Apply as a foliar spray according to local recommendations from shuck fall onwards. Use a retreatment interval of 28 days. Maximum number of applications per season not specified.	R4
Mancozeb	M3	Protectant	14	A	ALL	Registered in stone fruit for control of Brown Rot, Rust , Shot Hole and Freckle. Apply as a foliar spray at early bloom, at mid-full bloom, at petal fall and at shuck fall. Continue with a protectant program using a retreatment interval of 14 days. Maximum number of applications per season not specified.	R2
Metiram (Polyram)	M3	Protectant	14	A	ALL	Registered in stone fruit for control of Rust and Shot-Hole. Apply as a foliar spray at petal fall, shuck fall, then 4 weeks after shuck fall. In WA only, apply the first spray at petal fall, the second spray 4 weeks later and the third spray a further 4 weeks later.	R2
Propiconazole	3	Protectant & Curative	1	A	SA	Registered in apricots for control of Prune Rust (<i>Tranzschelia discolor</i>). Apply as a foliar spray when the disease first occurs. Further applications should be made when the disease occurs on new growth. Maximum of 5 applications per season.	R3
					NSW, SA, VIC & WA	Registered in plums (prune production) for control of Prune Rust (<i>Tranzschelia discolor</i>). Apply as a foliar spray when the disease first occurs. Further applications should be made when the disease occurs on new growth. Maximum of 5 applications per season.	
Sulfur	M2	Protectant	NR	A	ALL	Registered in peaches, nectarines and plums for control of Rust . Apply as a foliar spray as required during November to January. Retreatment interval and maximum number of applications per season not specified.	R4

Disease / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Regulatory risk
Zineb	M3	Protectant	14	A	ALL	Registered in peaches, prunes, plums (not early varieties) and nectarines for control of Rust . Apply as a foliar spray from December to March, using a 28 day retreatment interval. Maximum number of applications per season not specified but a maximum of 4 applications is implied with the retreatment interval of 28 days from December to March.	R2
Cyprodinil (Solaris) Adama	9	Protectant & Curative	NR	P-A	ALL	Registered in apricots, nectarines, peaches and plums for control of Blossom Blight and Brown Rot. Registered for control of Blossom Blight / Brown Rot, Rust and Shot Hole in almonds.	R4
Fluopyram + Trifloxystrobin (Luna Sensation) Bayer	7+11	Protectant & Curative	1 NG	P-A	ALL	Registered in stone fruit for control of Blossom Blight, Shot-Hole and Brown Rot. Registered for control of Rust (<i>Tranzschelia discolor</i>) in almonds.	R4
Penthiopyrad (Fontelis) Corteva	7	Protectant	NR NG	P-A		Registered in stone fruits for control of Brown Rot / Blossom Blight (<i>Monilinia</i> spp.) and Scab / Freckle (<i>Cladosporium carpophilum</i> , <i>Venturia carpophila</i>). US Registration for control of Rust in stone fruit.	R4
Florylpicoxamid (Verpixo Adavelt) Corteva	21	Protectant		P		Registered for control of Powdery Mildew in cucurbits and fruiting vegetables, control of Sclerotinia Rot in lettuce, and control of Grey Mould and Powdery Mildew in strawberries. Also has activity on Septoria, Anthracnose, Alternaria, Scab, <i>Monilinia</i> , Rust and <i>Mycosphaerella</i> spp.	R4
Fluopyram + Tebuconazole (Luna Experience) Bayer	7+3	Protectant & Curative		P		Registered for control of various diseases in various fruit and vegetable crops, tree nuts and pyrethrum. Registered for control of Rust (<i>Tranzschelia discolor</i>) in almonds.	R3
Fluxapyroxad + Pyraclostrobin (Merivon) BASF	7+11	Protectant & Curative		P		Registered for control of Leaf Rust (<i>Tranzschelia discolor</i>) in almonds.	R4

Disease / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Regulatory risk
Mefentrifluconazole (Belanty) BASF	3	Protectant & Curative		P		Registered for control of Powdery Mildew in grapes, control of Black Spot and Powdery Mildew and suppression of Alternaria in apples, control of Blossom Blight and suppression of Leaf Rust, Shot Hole and Hull Rot in almonds, control of Husk Spot in macadamias, control of Powdery Mildew and Gummy Stem Blight in cucurbits, and control of Powdery Mildew and Target Spot in fruiting vegetables. US registration for control of Rust in stonefruit.	R4
Pydiflumetofen + Difenoconazole (Miravis Duo) Syngenta	7+3	Protectant & Curative		P		Registered for control of various diseases in fruiting vegetables, cucurbits. Root vegetables, celery and peanuts. US registration for control of Leaf Rust in stonefruit.	R3

Disease / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Regulatory risk
Shot-Hole (<i>Wilsonamyces carpophilus</i>) Priority: Moderate Shot-Hole is rated as a moderate priority in VIC, SA and NSW. Shot-Hole affects leaves, fruit and buds. It decreases the efficiency of the tree by decreasing its photosynthetic capacity. Fruit infections are superficial and don't generally impact on saleability for drying.							
Chlorothalonil (Bravo)	M5	Protectant	7	A	ALL	Registered in apricots for control of Brown Rot - Fruit (<i>Monilinia fructicola</i>), Blossom Blight (<i>Monilinia laxa</i>), Shot-Hole (<i>Stigmina carpophila</i>), Stone Fruit Rust (<i>Tranzschelia discolor</i>) and Freckle (<i>Venturia carpophila</i>). Apply as a foliar spray at bud-swell, bud burst, pink bud, shuck fall and cap fall, and then on a retreatment interval of 10-14 days. Apply no later than 35 days pre-harvest as unacceptable skin damage may occur. Maximum number of applications per season not specified.	R2
						Registered in nectarines for control of Shot-Hole (<i>Stigmina carpophila</i>), Brown Rot - Fruit (<i>Monilinia fructicola</i>) and Blossom Blight (<i>Monilinia laxa</i>). Apply as a foliar spray at bud-swell, pink bud, shuck fall and then on a retreatment interval of 14 days. Apply no later than 35 days pre-harvest as unacceptable skin damage may occur. Maximum number of applications per season not specified.	
						Registered in peaches for control of Brown Rot - Fruit (<i>Monilinia fructicola</i>), Blossom Blight (<i>Monilinia laxa</i>), Shot-Hole (<i>Stigmina carpophila</i>), Stone Fruit Rust (<i>Tranzschelia discolor</i>) and Leaf Curl (<i>Taphrina deformans</i>). Apply as a foliar spray at bud-swell and then on a retreatment interval of 7-14 days. Apply no later than 35 days pre-harvest as unacceptable skin damage may occur. Maximum number of applications per season not specified.	
			1			Registered in plums for control of Brown Rot - Fruit (<i>Monilinia fructicola</i>), Blossom Blight (<i>Monilinia laxa</i>), Shot-Hole (<i>Stigmina carpophila</i>) and Stone Fruit Rust (<i>Tranzschelia discolor</i>). Apply as a foliar spray at bud-swell, bud burst, pink bud, shuck fall and cap fall. Retreatment interval and maximum number of applications per season not specified.	

Disease / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Regulatory risk
Copper	M1	Protectant	1	A	ALL	Registered in apricots for control of Freckle and Shothole , in nectarines and peaches for control of Shot Hole and Leaf Curl (<i>Taphrina deformans</i>), in plums for control of Shot Hole . Apply as a foliar spray when buds are swelling but before and within 1 week of bud opening. Retreatment interval and maximum number of applications per season not specified.	R4
Dithianon (Delan)	M9	Protectant	21	A	ALL	Registered in stone fruit for control of Shot-Hole (<i>Stigminta carpophila</i>) and Scab / Peach Blight. Apply as a foliar spray according to local recommendations at leaf fall and early to mid blossoming. Retreatment interval and maximum number of applications per season not specified.	R4
Fluopyram + Trifloxystrobin (Luna Sensation) Bayer	7+11	Protectant & Curative	1 NG	A	ALL	Registered in stone fruit for control of Blossom Blight, Shot-Hole and Brown Rot. Apply as a foliar spray commencing at early pink bud. Use a retreatment interval of 10-14 days. Maximum of 2 applications per season.	R4
Mancozeb	M3	Protectant	14	A	ALL	Registered in stone fruit for control of Brown Rot, Rust, Shot Hole and Freckle. Apply as a foliar spray at early bloom, at mid-full bloom, at petal fall and at shuck fall. Continue with a protectant program using a retreatment interval of 14 days. Maximum number of applications per season not specified.	R2
Metiram (Polyram)	M3	Protectant	14	A	ALL	Registered in stone fruit for control of Rust and Shot-Hole . Apply as a foliar spray commencing at petal fall, followed by 3 further applications using a retreatment interval of 10-14 days. In WA only, apply the first spray at pink bud, then petal fall, followed by 3 further applications using a retreatment interval of 10-14 days.	R2
Thiram	M3	Protectant	7	A	ALL	Registered in stone fruits for control of Brown Rot – Fruit (<i>Monilinia fructicola</i>) and Shot-Hole (<i>Stigminta carpophila</i>). Apply as a foliar spray at shuck fall, after early bud swell copper sprays, followed by a further 2 applications using a retreatment interval of 28 days. Maximum number of applications per season not specified.	R2

Disease / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Regulatory risk
Ziram	M3	Protectant	7	A	ALL	Registered in nectarines and peaches for control of Blossom Blight (<i>Monilinia laxa</i>), Brown Rot (<i>Monilinia fructicola</i>), Shot-Hole (<i>Stigmia carpophila</i>), Leaf Curl (<i>Taphrina deformans</i>) and Freckle (<i>Venturia carpophila</i>). Apply as a foliar spray at mid full bloom, early petal fall and at shuck fall, and after fruit starts to ripen using a 14 day retreatment interval. Maximum number of applications per season not specified.	R2
Cyprodinil (Solaris) Adama	9	Protectant & Curative	NR	P-A	ALL	Registered in apricots, nectarines, peaches and plums for control of Blossom Blight and Brown Rot. Registered for control of Blossom Blight / Brown Rot, Rust and Shot Hole in almonds.	R4
Azoxystrobin + Tebuconazole (Custodia) Adama	11+3	Protectant & Curative		P		Registered for control of Shot Hole in almonds.	R3
<i>Bacillus amyloliquefaciens</i> strain QST713 (Serenade Opti) Bayer	BM02	Biological	NR	P		Registered for control of Botrytis in grapevines and strawberries, Anthracnose and Stem End Rot in avocado and other tropical fruits (excluding banana), and suppression of Bacterial Spot in tomatoes, capsicums and chillies. US registration for control of Shot Hole in stonefruit.	R4
<i>Bacillus amyloliquefaciens</i> (Serifel) BASF	BM02	Biological	NR	P		Registered for control of Botrytis in grapevines and berries. US registration for control of Shot Hole in stonefruit.	R4
Fluopyram + Tebuconazole (Luna Experience) Bayer	7+3	Protectant & Curative		P		Registered for control of various diseases in various fruit and vegetable crops, tree nuts and pyrethrum. US registration for control of Shot Hole in stonefruit.	R3
Fluxapyroxad + Pyraclostrobin (Merivon) BASF	7+11	Protectant & Curative		P		Registered for control of Alternaria Leaf Spot, Black Spot, Brown Rot, Nut Scab, Shot-Hole and Stone Fruit Rust in almonds. US registration for control of Shot Hole in stonefruit.	R4

Disease / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Regulatory risk
Mefentrifluconazole (Belanty) BASF	3	Protectant & Curative		P		Registered for control of Powdery Mildew in grapes, control of Black Spot and Powdery Mildew and suppression of Alternaria in apples, control of Blossom Blight and suppression of Leaf Rust, Shot Hole and Hull Rot in almonds, control of Husk Spot in macadamias, control of Powdery Mildew and Gummy Stem Blight in cucurbits, and control of Powdery Mildew and Target Spot in fruiting vegetables. US registration for control of Shot Hole in stonefruit.	R4
Pydiflumetofen + Difenconazole (Miravis Duo) Syngenta	7+3	Protectant & Curative		P		Registered for control of various diseases in fruiting vegetables, cucurbits. Root vegetables, celery and peanuts. US registration for control of Shot Hole in stonefruit.	R3
Freckle and Scab (<i>Venturia carpophila</i> , (anamorph <i>Cladosporium carpophilum</i>)) Priority: Moderate Freckle and Scab is rated as a moderate priority in VIC, SA and NSW. The main symptoms of Freckle occur on the fruit, but lesions also occur on leaves, twigs and young branches. Good orchard sanitation will reduce the risk of infection and regular protectant fungicide programs used for other diseases will provide incidental control of Freckle.							
Chlorothalonil	M5	Protectant	7	A	ALL	Registered in apricots for control of Brown Rot - Fruit (<i>Monilinia fructicola</i>), Blossom Blight (<i>Monilinia laxa</i>), Shot-Hole (<i>Stigmina carpophila</i>), Stone Fruit Rust (<i>Tranzschelia discolor</i>) and Freckle (<i>Venturia carpophila</i>). Apply as a foliar spray at bud-swell, bud burst, pink bud, shuck fall and cap fall, and then on a retreatment interval of 10-14 days. Apply no later than 35 days pre-harvest as unacceptable skin damage may occur. Maximum number of applications per season not specified.	R2
Copper	M1	Protectant	1	A	ALL (excl. QLD)	Registered in stone fruit for control of Blossom Blight, Freckle , Rust, Leaf Curl and Shot Hole. Apply as a foliar spray from late budswell to early blossom. Retreatment interval and maximum number of applications per season not specified.	R4
Dithianon (Delan)	M9	Protectant	21	A	ALL	Registered in stone fruit for control of Shot-Hole (<i>Stigmina carpophila</i>) and Scab / Peach Blight. Apply as a foliar spray according to local recommendations at leaf fall and early to mid blossoming. Retreatment interval and maximum number of applications per season not specified.	R4

Disease / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Regulatory risk
Mancozeb	M3	Protectant	14	A	ALL	Registered in stone fruit for control of Brown Rot, Rust, Shot Hole and Freckle . Apply as a foliar spray at early bloom, at mid-full bloom, at petal fall and at shuck fall. Continue with a protectant program using a retreatment interval of 14 days. Maximum number of applications per season not specified.	R2
Penthiopyrad (Fontelis) Corteva	7	Protectant	NR NG	A	ALL	Registered in stone fruits for control of Brown Rot / Blossom Blight (<i>Monilinia</i> spp.) and Scab / Freckle (<i>Cladosporium carpophilum</i> , <i>Venturia carpophila</i>). Apply as a foliar spray commencing prior to disease development. Use a retreatment interval of 7-14 days. Maximum of 3 applications per season, with no more than 2 sequential applications.	R4
Thiram	M3	Protectant	7	A	ALL	Registered in apricots for control of Freckle (<i>Venturia carpophila</i>). Apply as a foliar spray at shuck fall, after early bud swell copper sprays, followed by a further 2 applications using a retreatment interval of 28 days. Maximum number of applications per season not specified.	R2
Ziram	M3	Protectant	7	A	ALL	Registered in nectarines and peaches for control of Blossom Blight (<i>Monilinia laxa</i>), Brown Rot (<i>Monilinia fructicola</i>), Shot-Hole (<i>Stigmata carpophila</i>), Leaf Curl (<i>Taphrina deformans</i>) and Freckle (<i>Venturia carpophila</i>). Apply as a foliar spray commencing at shuck fall, and continuing until 56 days before harvest using a 21 day retreatment interval. Maximum number of applications per season not specified.	R2
Florypicoxamid (Verpixo Adavelt) Corteva	21	Protectant		P		Registered for control of Powdery Mildew in cucurbits and fruiting vegetables, control of Sclerotinia Rot in lettuce, and control of Grey Mould and Powdery Mildew in strawberries. Also has activity on Septoria, Anthracnose, Alternaria, Scab , <i>Monilinia</i> , Rust and <i>Mycosphaerella</i> spp.	R4
Fluopyram + Tebuconazole (Luna Experience) Bayer	7+3	Protectant & Curative		P		Registered for control of various diseases in various fruit and vegetable crops, tree nuts and pyrethrum. US registration for control of Scab in stonefruit.	R3
Fluxapyroxad + Pyraclostrobin (Merivon) BASF	7+11	Protectant & Curative		P		Registered in almonds for control of Alternaria Leaf Spot, Black Spot, Brown Rot, Nut Scab , Shot-Hole and Stone Fruit Rust. US registration for control of Scab in stonefruit.	R4

Disease / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Regulatory risk
Mefentrifluconazole (Belanty) BASF	3	Protectant & Curative		P		Registered for control of Powdery Mildew in grapes, control of Black Spot and Powdery Mildew and suppression of Alternaria in apples, control of Blossom Blight and suppression of Leaf Rust, Shot Hole and Hull Rot in almonds, control of Husk Spot in macadamias, control of Powdery Mildew and Gummy Stem Blight in cucurbits, and control of Powdery Mildew and Target Spot in fruiting vegetables. US registration for control of Scab in stonefruit.	R4
Pydiflumetofen + Difenconazole (Miravis Duo) Syngenta	7+3	Protectant & Curative		P		Registered for control of various diseases in fruiting vegetables, cucurbits. Root vegetables, celery and peanuts. US registration for control of Scab in stonefruit.	R3
Bacterial Spot (<i>Xanthomonas arboricola</i>) Bacterial Canker (<i>Pseudomonas syringae</i>) Priority: Moderate Bacterial Spot is rated as a high priority in VIC, a moderate priority in NSW and a low priority in SA, and Bacterial Canker is rated as a high priority in VIC, a moderate priority in SA and a low priority in NSW. Losses from Bacterial Spot can occur directly from infection of fruit. Up to 50% of fruit on susceptible varieties may be unsaleable. Bacterial Canker can affect all tree parts. Economic losses result from reduction in fruit yield, and from branches or whole trees dying.							
Copper	M1	Protectant	1	A	QLD	Registered in stone fruit for control of Bacterial Spot, Bacterial Canker , Leaf Curl and Shot Hole. Apply as a foliar spray at early bud movement and at blossoming (plums only). Retreatment interval and maximum number of applications per season not specified.	R4
<i>Bacillus amyloliquefaciens</i> strain QST713 (Serenade Opti) Bayer	BM02	Biological	NR	P		Registered for control of Botrytis in grapevines and strawberries, Anthracnose and Stem End Rot in avocado and other tropical fruits (excluding banana), and suppression of Bacterial Spot in tomatoes, capsicums and chillies.	R4
<i>Bacillus amyloliquefaciens</i> (Serifel) BASF	BM02	Biological	NR	P		Registered for control of Botrytis in grapevines and berries. US registration for control of Bacterial Canker and Bacterial Spot in stonefruit.	R4

Disease / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Regulatory risk
Root Rot / Collar Rot (<i>Phytophthora</i> spp.) Priority: Moderate Root Rot / Collar Rot is rated as a moderate priority in SA and NSW, and as a low priority in VIC. Phytophthora is a widespread soil-borne pathogen that thrives in poorly drained soil and warm temperatures. Severe infections can lead to severe necrosis of roots and subsequent yellowing and wilting of above ground plant parts. Trees can eventually die. Management includes site selection to ensure good drainage, improving soil organic matter, careful irrigation management and fungicide treatments.							
Fosetyl-Aluminium	33	Protectant & Curative	NR	A	ALL (excl. QLD)	Registered in peaches for control of Collar Rot (<i>Phytophthora cactorum</i>). Apply either as a foliar spray, starting with the first spray in early spring when trees are in full leaf followed by a second spray 12 weeks later when the spring growth flush has matured, or as a soil drench for severely diseased trees that have inadequate leaf area for a foliar spray to be effective.	R3
Fosetyl-Aluminium PER85273	33	Protectant & Curative	NR	A	ALL (excl. VIC)	Permitted in apricot, peach, nectarine and plum for control of Phytophthora Trunk & Collar Rot (<i>Phytophthora cactorum</i> , <i>P. cinnamomi</i> & <i>P. cambivora</i>). Apply either as a foliar spray, starting with the first spray in early spring when trees are in full leaf followed by a second spray 12 weeks later when the spring growth flush has matured, or as a soil drench for severely diseased trees that have inadequate leaf area for a foliar spray to be effective.	R3
<i>Bacillus amyloliquefaciens</i> Strain QST 713 (Serenade Prime Soil Ameliorant and Biofungicide) Bayer	BM02	Biological	NR	P		Registered in tropical fruit (excluding banana) for control of Anthracnose (<i>Colletotrichum</i> spp.) and suppression of Stem End Rot. Registered for suppression of soil-borne diseases such as Black Scurf in potatoes and Pineapple Disease in sugarcane and it is also registered as a biofungicide for control of Yellow Sigatoka in bananas as a foliar spray.	R4
Mandipropamid (Revus) Syngenta	40	Protectant & Curative		P		Registered for control of Downy Mildew in grapes, lettuce, leafy vegetables and oilseed poppies. US registration for control of Phytophthora in various crops, including as a foliar application for protection of citrus from Phytophthora Root Rot.	R4

Disease / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Regulatory risk
Oxathiopiprolin (Zorvec Enicade) Corteva	49	Protectant & Curative		P		Registered for control of Downy Mildew in bulb vegetables, brassicas, cucurbits, leafy vegetables and poppies. Permitted for control of Phytophthora Root Rot in raspberries and blackberries. US registration for control of Phytophthora Canker and Brown Rot in citrus.	R4
Silver Leaf (<i>Chondrostereum purpureum</i>) Priority: Moderate Silver Leaf is rated as a moderate priority in VIC and NSW, and as a low priority in SA. The Silver Leaf pathogen causes symptoms on leaves and causes an aggressive wood-rotting disease. It can lead to tree death in severe cases. Correct pruning techniques are important to prevent initial infection and infected limbs should be removed and destroyed to limit further spread.							
Iodocarb + Cyproconazole (Rapid Pruning Wound Dressing)	28+3	Protectant & Curative	NR	A	ALL (excl. WA)	Registered in apricots, plums and peaches for control of Silver Leaf (<i>Chondrostereum purpureum</i>). Apply undiluted product thickly to dry wound surface with paintbrush. Do not apply during the growing season. Apply on the same day as pruning cut is made or wind damage occurs. Large wounds on a main trunk would benefit from a second application.	R3
Crown Gall (<i>Agrobacterium tumefaciens</i>) Priority: Low Crown Gall is rated as a moderate priority in VIC and SA, and as a low priority in NSW. Crown Gall is widespread but is generally not a serious problem and is easily controlled.							
<i>Rhizobium rhizogenes</i> Strain K1026 (NoGall)	-	Protectant	NR	A	ALL	Registered in stone fruit for control of Crown Gall . Apply as a solution at planting to seeds, seedlings or cuttings.	R4

Disease / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Regulatory risk
Leaf Curl (<i>Taphrina deformans</i>) Priority: Low Leaf Curl is rated as a low priority in VIC, SA and NSW. Leaf Curl causes distortion and loss of foliage which can lead to reduced fruit production. Timing of fungicide applications is critical for achieving effective control.							
Chlorothalonil (Bravo)	M5	Protectant	7	A	ALL	Registered in peaches for control of Brown Rot - Fruit (<i>Monilinia fructicola</i>), Blossom Blight (<i>Monilinia laxa</i>), Shot-Hole (<i>Stigmata carpophila</i>), Stone Fruit Rust (<i>Tranzschelia discolor</i>) and Leaf Curl (<i>Taphrina deformans</i>). Apply as a foliar spray starting at bud-swell. Use a retreatment interval of 7-14 days. Apply no later than 35 days pre-harvest as unacceptable skin damage may occur. Maximum number of treatments per season not specified.	R2
Copper	M1	Protectant	1	A	ALL	Registered in stone fruit for control of Shothole and Leaf Curl (<i>Taphrina deformans</i>). Apply as a foliar spray when buds are swelling but before and within 1 week of bud opening. Retreatment interval and maximum number of applications per season not specified.	R4
Dithianon (Delan)	M9	Protectant	21	A	ALL	Registered in nectarines and peaches for control of Leaf Curl (<i>Taphrina deformans</i>) and Rust (<i>Uromyces</i> spp.) Apply as a foliar spray at early budswell. Retreatment interval and maximum number of applications per season not specified.	R4
Dodine (Syllit)	U12	Protectant & Curative	NR NG	A	ALL	Registered in peaches and nectarines for control of Peach Leaf Curl (<i>Taphrina deformans</i>) and Blossom Blight (<i>Monilinia</i> spp.) Apply as a foliar spray at bud swell, early bloom and petal fall. Do not apply after petal fall. Retreatment interval and maximum number of applications per season not specified.	R4
Ziram	M3	Protectant	7	A	ALL	Registered in nectarines and peaches for control of Blossom Blight (<i>Monilinia laxa</i>), Brown Rot (<i>Monilinia fructicola</i>), Shot-Hole (<i>Stigmata carpophila</i>), Leaf Curl (<i>Taphrina deformans</i>) and Freckle (<i>Venturia carpophila</i>). Apply as a foliar spray at early bud swell. Retreatment interval and maximum number of applications per season not specified.	R2

Disease / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Regulatory risk
Fluopyram + Tebuconazole (Luna Experience) Bayer	7+3	Protectant & Curative		P		Registered for control of various diseases in various fruit and vegetable crops, tree nuts and pyrethrum. US registration for control of Peach Leaf Curl in stonefruit.	R3
Armillaria Root Rot (<i>Armillaria mellea</i>) Priority: Low Armillaria Root Rot is rated as a low priority in VIC, SA and NSW. Armillaria is a soil-borne fungus that causes root rots. Management recommendations are similar to those for Phytophthora.							
<i>Streptomyces lydicus</i> (Actinovate) Novozymes BioAg	BM02	Biological	NR	P-A	ALL	Registered in all crops as a biological soil amendment to stimulate soil organisms to make nutrients more available for plant growth. Registered for control of Phytophthora in strawberries and tomato.	R4
<i>Bacillus amyloliquefaciens</i> Strain QST 713 (Serenade Prime Soil Ameliorant and Biofungicide) Bayer	BM02	Biological	NR	P		Registered in tropical fruit (excluding banana) for control of Anthracnose (<i>Colletotrichum</i> spp.) and suppression of Stem End Rot. Registered for suppression of soil-borne diseases such as Black Scurf in potatoes and Pineapple Disease in sugarcane and it is also registered as a biofungicide for control of Yellow Sigatoka in bananas as a foliar spray.	R4

4.2 Insect and mite pests of prune and dried tree fruit

4.2.1 Insect and mite pest priorities

Common name	Scientific name
High	
Queensland Fruit Fly	<i>Bactrocera tryoni</i>
Mediterranean Fruit Fly	<i>Ceratitis capitata</i>
Two Spotted Mite	<i>Tetranychus urticae</i>
Bryobia Mite	<i>Bryobia rubrioculus</i>
Moderate	
San Jose Scale	<i>Diaspidiotus perniciosus</i>
Dried Fruit Beetle	<i>Carpophilus</i> spp.
European Earwig	<i>Forficula auricularia</i>
European Red Mite	<i>Panonychus ulmi</i>
Low	
Western Flower Thrips	<i>Frankliniella occidentalis</i>
Plague Thrips	<i>Thrips imaginis</i>
Light Brown Apple Moth	<i>Epiphyas postvittana</i>
Oriental Fruit Moth	<i>Grapholita molesta</i>
Silver Peach Mite	<i>Aculus cornutus</i>
Black Peach Aphid	<i>Brachycaudus persicae</i>
Green Peach Aphid	<i>Myzus persicae</i>
Root Lesion Nematode	<i>Pratylenchus</i> spp.
Peach White Scale	<i>Pseudaulacaspis pentagona</i>
Rutherglen Bug	<i>Nysius vinitor</i>
Snails	<i>Gastropoda</i> spp.

The high priority insect pests across the prune and dried tree fruit industries are Queensland Fruit Fly, Mediterranean Fruit Fly, Two Spotted Mite and Bryobia Mite. Available and potential products for these pests are listed in Section 4.2.2.

It is important to take an Integrated Pest Management (IPM) Approach to pest control in prunes and dried tree fruit. The diversity of insects that will attack crops mean that a planned, strategic approach is required. A range of control measures should be used, including cultural controls, biological controls and insecticides. Beneficial insects such as predators, parasitoids

and pollinators should be encouraged and can be introduced artificially if required. Insecticide choice should be made with regard to preserving the beneficial insects that play an important role in the crop.

The diverse range of insect and mite pests in prunes and dried tree fruit necessitates careful planning with resistance management. Growers should refer to resistance management strategies listed on the CropLife website⁷ when planning their pest management programs.

⁷ <https://www.croplife.org.au/resources/programs/resistance-management/>

4.2.2 Available and potential products for priority insects and mites

TABLE KEY: Note that blank fields in the table indicate no information has been provided.

Availability		Regulatory risk (refer to Appendix 6)	
A	Available via either registration or permit approval	R1	Short-term risk: Critical concern over retaining access < 1 year
P	Potential - a possible candidate to pursue for registration or permit	R2	Medium-term risk: Maintaining access of significant concern <2-5 years
P-A	Potential, already approved in the crop for another use	R3	Long-term: Potential issues associated with use - Monitoring required < 5 years
		R4	No current risk / concerns
Withholding Period (WHP) – Number of days from last treatment to harvest (H) or Grazing (G)			
Harvest	H	Not Required when used as directed	NR
Grazing	G	No Grazing Permitted	NG
IPM – indicative overall impact on beneficials (based on the Cotton Pest Management Guide 2025-26 and cotton use patterns)			
VL – Very low; L – Low; M – Moderate; H – High; VH – Very High; - not specified			

Pest / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Impact on beneficials	Regulatory risk
Queensland Fruit Fly (<i>Bactrocera tryoni</i>) Mediterranean Fruit Fly (<i>Ceratitis capitata</i>) Priority: High Queensland Fruit Fly is rated as a high priority in VIC, SA and NSW, and Mediterranean Fruit Fly is rated as a high priority in VIC and SA, and as a moderate priority in NSW. Fruit Fly lay their eggs in maturing and ripe fruit. Larvae hatch from these eggs and the fruit is usually destroyed within days by their feeding and associated rotting.								
4-(P-Acetoxyphenyl)-2-Butanone + Malathion	1B	Fruit Fly Trap	NR	A	ALL	Registered as a fruit fly trap for Queensland Fruit Fly . Used to detect the presence of Fruit Fly in the orchard to assist with making decisions about control.	H Bee:H	R4
4-(P-Acetoxyphenyl) - 2-Butanone + Fipronil	2B	Fruit Fly Trap	NR	A	ALL	Registered in fruit crops for population reduction and population monitoring of Queensland Fruit Fly and Lesser Queensland Fruit Fly. Single stations can be used for population monitoring. Control of fruit fly required placement of 16 stations per hectare and should be used in conjunction with regular insecticide cover sprays.	M Bee:VH	R2

Pest / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Impact on beneficials	Regulatory risk
Acetamiprid + Novaluron (Cormoran) Adama	4A+15	Contact & Ingestion	7 NG	A	ALL	Registered in stone fruit for control of Black Peach Aphid (<i>Brachycaudus persicae</i>), Green Peach Aphid (<i>Myzus persicae</i>), Light Brown Apple Moth (<i>Epiphyas postvittana</i>), Oriental Fruit Moth (<i>Grapholita molesta</i>) and San Jose Scale (<i>Quadraspidiotus perniciosus</i>) and suppression of Mediterranean Fruit Fly (<i>Ceratitis capitata</i>) and Queensland Fruit Fly (<i>Bactrocera tryoni</i>). Apply as a foliar spray when monitoring indicates fruit fly activity. Use a retreatment interval of 7-10 days and do not apply consecutive applications. Maximum of 2 applications per season.	M Bee:M	R2
Alpha-Cypermethrin PER91059	3A	Contact	7 NG	A	ALL	Permitted in stone fruit (except cherries) for control of Fruit Flies . Apply as a foliar spray when control is required. Use a minimum retreatment interval of 7 days. Maximum of 3 applications per crop, with no more than 2 consecutive applications.	VH Bee:H	R3
Clothianidin (Samurai) Sumitomo	4A	Contact & Ingestion	7 NG	A	ALL	Registered in stone fruit for control of Queensland Fruit Fly , Mediterranean Fruit Fly and Carpophilus Beetle. Apply as a foliar spray when monitoring indicates fruit fly activity. Apply 3 consecutive applications using a retreatment interval of 7 days. Maximum of 3 applications per season.	M Bee:VH	R2
Deltamethrin (MagMed) Sustainable Ventures PER96797	3A	Contact	NR	A	WA	Permitted in stonefruit for control of Mediterranean Fruit Fly (<i>Ceratitis capitata</i>). Apply devices in the orchard early in the season before fruit becomes susceptible to attack. Hang as high as practical and on the sunny side of the tree.	VH Bee:H	R4
Dimethoate PER13859	1B	Contact	NR	A	ALL	Permitted in fruit fly host crops for orchard clean-up of Fruit Fly following harvest. Do not apply more than 2 applications per host crop. Apply as a foliar and/or ground spray to both fallen and retained fruit. Produce treated must not be harvested, collected or supplied for human or animal consumption.	H Bee:H	R3

Pest / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Impact on beneficials	Regulatory risk
Etofenprox (Trebon) Sipcam	3A	Contact	3 NG	A	ALL	Registered in stone fruit (except cherries) for control of Queensland Fruit Fly and Mediterranean Fruit Fly . Apply as a foliar spray commencing as maturity approaches (fruit turning colour) and pest numbers are at critical threshold. Use a minimum retreatment interval of 7 days. Maximum of 3 applications per season.	VH Bee:H	R4
Malathion	1B	Bait / Contact	3	A	ALL	Registered in fruit trees as a bait for control of Fruit Fly . Apply as a foliar, strip or spot spray. Only apply to the leaves, trunk and lower limbs of trees. Do not apply directly to fruit. Apply weekly from 6 weeks before harvest to 2 weeks after harvest.	H Bee:H	R4
Pyrethrins (Pyganic)	3A	Contact	NR	A	ALL	Registered in stone fruit as a clean up spray to control insects prior to harvest such as Fruit Fly , Rutherglen Bug and Spiders. Apply as a foliar spray.	VH Bee:H	R4
Spinetoram (Delegate) Corteva PER12590	5	Ingestion	3	A	ACT, NSW, QLD & NT	Permitted in stone fruit for suppression of Queensland Fruit Fly (<i>Bactrocera tryoni</i>) and Lesser Queensland Fruit Fly (<i>Bactrocera neohumeralis</i>). Apply as a foliar spray commencing after stone set and when monitoring indicates pest pressure. Use a minimum retreatment interval of 14 days. Maximum of 4 applications per season.	M Bee:H	R4
					WA	Permitted in stone fruit for suppression of Mediterranean Fruit Fly (<i>Ceratitis capitata</i>). Apply as a foliar spray commencing after stone set and when monitoring indicates pest pressure. Use a minimum retreatment interval of 14 days. Maximum of 4 applications per season.		
Spinosad (Naturalure) Corteva	5	Bait / Ingestion	NR	A	ALL	Registered in fruit for control of Fruit Flies including Queensland Fruit Fly and Mediterranean Fruit Fly . Apply as either a band or a spot spray to the lower canopy of fruiting plants. Begin applications as soon as monitoring traps indicate flies are present and fruit is at a susceptible stage. Repeat applications every 7 days, re-applying sooner if rain washes off the deposit. Avoid spraying the fruit as phytotoxicity may occur.	L Bee:H	R4

Pest / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Impact on beneficials	Regulatory risk
Tetraniliprole (Vayego 200SC) Bayer	28	Ingestion	3 NG	A	ALL	Registered in stone fruit for control of Apple Weevil (<i>Otiorhynchus cribricollis</i>), Fuller's Rose Weevil (<i>Asynonychus cervinus</i>), Garden Weevil (<i>Phlyctinus callosus</i>), Oriental Fruit Moth (<i>Laspeyresia molesta</i> syn <i>Grapholita molesta</i>) and Mediterranean Fruit Fly (<i>Ceratitis capitata</i>) and suppression of Dried Fruit Beetles (<i>Carpophilus</i> spp.) Apply as a foliar spray commencing when monitoring indicates fruit fly activity and fruit are vulnerable to damage. Use a retreatment interval of 10 days. Maximum of 3 applications per season.	L-M Bee:L	R4
Thiacloprid PER14562	4A	Contact & Ingestion	14 NG	A	ALL	Permitted in stone fruit (excl. peaches) for control of Mediterranean Fruit Fly (<i>Ceratitis capitata</i>). Apply as a foliar spray when monitoring indicates fruit fly activity. Use a minimum retreatment interval of 14 days. Maximum of 3 applications per season.	M Bee:VH	R2
			21 NG			Registered in peaches for control of Mediterranean Fruit Fly (<i>Ceratitis capitata</i>). Apply as a foliar spray when monitoring indicates fruit fly activity. Use a minimum retreatment interval of 14 days. Maximum of 3 applications per season.		
Trichlorfon	1B	Contact	2 NG	A	QLD, NSW, VIC, WA & NT	Registered in stone fruit for control of Queensland Fruit Fly . Apply as a foliar spray commencing at the start of stinging. Use a retreatment interval of 7-10 days. Maximum number of applications not specified.	H Bee:H	R3
Trichlorfon PER14683	1B	Contact	7	A	ALL (excl. VIC)	Permitted in stone fruit for control of Queensland Fruit Fly (<i>Bactrocera tryoni</i>) and Mediterranean Fruit Fly (<i>Ceratitis capitata</i>). Apply as a foliar spray commencing at the start of stinging. Use a retreatment interval of 7-10 days. Maximum number of applications not specified.	H Bee:H	R3
Abamectin	6	Ingestion		P	ALL	Registered for control of Queensland Fruit Fly in citrus, blueberries, blackberries and raspberries.	M Bee:H	R3

Pest / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Impact on beneficials	Regulatory risk
Acetamiprid + Pyriproxyfen (Trivor) Adama	4A+7C	Ingestion / IGR		P		Registered for control of Fruit Fly in avocados, citrus and mangoes.	M Bee:H	R2
Two Spotted Mite (<i>Tetranychus urticae</i>) Bryobia Mite (<i>Bryobia rubrioculus</i>) Priority: High								
Two Spotted Mite and Bryobia Mite are rated as a high priority in NSW, a moderate priority in SA and as a low priority in VIC. Two-Spotted Mite is a serious sucking pest that can cause severe defoliation of trees. Bryobia Mite tends to cause occasional problems on plums. Heavy infestations cause mottling of foliage which may subsequently impact fruit size and colour. An integrated management program should be used, including reduction of dust in the orchard, use of non-disruptive pesticides, avoidance of tree stress and biological agents.								
Acequinocyl (Kanemite) UPL	20B	Contact & Ingestion	14 NG	A	ALL	Registered in stone fruit for control of Two-Spotted Mite (<i>Tetranychus urticae</i>). Apply as a foliar spray when crop monitoring indicates mite activity. Maximum of 1 application per season.	L Bee:L	R4
Bifenazate (Acramite)	20D	Contact & Ingestion	3 G:28	A	ALL	Registered in apricots, nectarines, peaches and plums for control of Two-Spotted Mite (<i>Tetranychus urticae</i>), European Red Mite (<i>Panonychus ulmi</i>) and Bryobia Mite (<i>Bryobia rubrioculus</i>). Apply as a foliar spray as soon as mites appear. Maximum of 1 application per season.	L Bee:H	R4
Clofentezine (Apollo)	10A	IGR / Contact	21	A	ALL	Registered in stone fruit for control of Two-Spotted Mite (<i>Tetranychus urticae</i>) and European Red Mite (<i>Panonychus ulmi</i>). Apply as a foliar spray when monitoring indicates that mite numbers require control. Maximum of 1 application per season.	L Bee:L	R4
Etoxazole (Paramite) Sumitomo	10B	IGR / Contact	7 NG	A	ALL	Registered in stone fruit (except cherries) for control of Two-Spotted Mite (<i>Tetranychus urticae</i>), European Red Mite (<i>Panonychus ulmi</i>) and Bryobia Mite (<i>Bryobia rubrioculus</i>). Apply as a foliar spray at the first sign of mite crawlers. Maximum of 1 application per season.	L Bee:VL	R4

Pest / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Impact on beneficials	Regulatory risk
Etiozazole + Piperonyl Butoxide (Motto RMR) Imtrade	10B	IGR / Contact	7	A	ALL	Registered in nectarines for control of Two-Spotted Mite (<i>Tetranychus urticae</i>) and European Red Mite (<i>Panonychus ulmi</i>). Apply as a foliar spray at the first sign of mite crawlers. Maximum of 1 application per season.	L Bee:VL	R4
Fenbutatin Oxide	12B	Contact	14	A	ALL	Registered in peaches and nectarines for control of Two-Spotted Mite (<i>Tetranychus urticae</i>), European Red Mite (<i>Panonychus ulmi</i>) and Bryobia Mite (<i>Bryobia rubrioculus</i>). Apply as a foliar spray when mite numbers warrant control. Retreatment interval and maximum number of applications not specified.	L Bee:L	R3
Fenbutatin Oxide + Hexythiazox (Sabamite) Sabachem	12B+10A	Contact	14	A	ALL	Registered in peaches and nectarines for control of Two-Spotted Mite (<i>Tetranychus urticae</i>) and European Red Mite (<i>Panonychus ulmi</i>). Apply as a foliar spray at first sign of mite activity. Maximum of 1 application per season.	L Bee:L	R3
Hexythiazox (Calibre)	10A	Contact	3	A	ALL	Registered in stone fruit for control of Two-Spotted Mite and European Red Mite. Apply as a foliar spray when mite numbers warrant control. Maximum of 1 application per season.	L Bee:L	R4
Milbemectin (Milbexknock) Sipcam	6	Ingestion	14 NG	A	ALL	Registered in stone fruit for control of Two Spotted Mite (<i>Tetranychus urticae</i>). Apply as a foliar spray soon after mite numbers reach threshold. Use a minimum retreatment interval of 7 days and do not apply consecutive treatments. Maximum of 2 applications per season.	M Bee:VH	R4
Petroleum Oil	-	Contact	1	A	ALL	Registered in stone fruit (except prunes) for control of Two Spotted Mite (NSW, QLD), San Jose Scale, Oyster Shell Scale, Bryobia Mite Eggs and European Mite Eggs. Apply as a foliar spray during dormant period up to bud swell. Retreatment interval and maximum number of applications per season not specified.	L Bee:L	R4

Pest / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Impact on beneficials	Regulatory risk
Potassium Salts of Fatty Acid (Natrasoap)	-	Contact	NR	A	ALL	Registered in fruit for control of Aphids, Thrips, Mealybug, Two-Spotted Mite , Spider Mite and Whitefly. Apply as a cover spray. Retreatment interval and maximum number of treatments not specified.	L Bee:L	R4
Propargite	12C	Contact	7	A	ALL	Registered in stonefruit for control of Two Spotted Mite and European Red Mite. Apply as a foliar spray as soon as mites appear. Retreatment interval not specified. Maximum of 2 applications per season.	M Bee:L	R3
Pyridaben (Sanmite)	10A	IGR / Contact	1	A	ALL	Registered in stonefruit for control of Two Spotted Mite (<i>Tetranychus urticae</i>) and European Red Mite (<i>Panonychus ulmi</i>). Apply as a foliar spray before the pest reaches damaging levels. Maximum of 1 application per season.	L Bee:L	R4
Spiromesifen (Interrupt) Bayer	23	Ingestion	14 NG	A	ALL	Registered in stone fruit for control of Two Spotted Mite (<i>Tetranychus urticae</i>). Apply as a foliar spray once local thresholds are reached. Maximum of 1 application per season.	M Bee:VL	R4
Tebufenpyrad (Pyranica) Sipcam	21A	Contact & Ingestion	14 NG	A	ALL	Registered in peaches for control of Two Spotted Mite (<i>Tetranychus urticae</i>) and European Red Mite (<i>Panonychus ulmi</i>). Apply as a foliar spray before mite infestation reached 70% of leaves infested. Retreatment interval and maximum number of applications per season not specified.	M Bee:H	R4
Cyflumetofen (Danisaraba) BASF	25A	Contact		P		Registered for control of Two Spotted Mite (<i>Tetranychus urticae</i>) in pome fruit, almond, citrus, grapes, strawberries, fruiting vegetables and ornamentals.	L Bee:L	R4
Cyantraniliprole + Diafenthiuron (Minecto Forte) Syngenta	28+12A	Ingestion		P		Registered for control of Two-Spotted Mite (<i>Tetranychus urticae</i>) in cucurbits and fruiting vegetables.	M Bee:VH	R4
Isocycloseram (Simodis) Syngenta	30	Ingestion		P		Registered for control of Two-Spotted Mite (<i>Tetranychus urticae</i>) in cucurbits and fruiting vegetables.	H Bee:VH	R4

Pest / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Impact on beneficials	Regulatory risk
Magnesium Hydroxide (Magnera) UPL	-	Contact		P		Registered for suppression of Two-Spotted Mite in tomatoes and cucurbits.	L Bee:L	R4
Orange Oil (Prev-Am) Oro Agri	-	Contact		P		Registered for control of Two-Spotted Mite (<i>Tetranychus urticae</i>) in tomato, eggplant, sugar snap peas, snow peas, raspberries, strawberries and cucurbits.	L Bee:L	R4
San Jose Scale (<i>Diaspidiotus perniciosus</i>) Priority: Moderate San Jose Scale is rated as a high priority in SA, and as a moderate priority in VIC and NSW. San Jose Scale damages the tree by feeding on twigs, branches and fruit. In extreme cases entire trees can be killed. Good orchard sanitation and the use of cover sprays are required to manage this pest.								
Acetamiprid + Novaluron (Cormoran) Adama	4A+15	Contact & Ingestion	7 NG	A	ALL	Registered in stone fruit for control of Black Peach Aphid (<i>Brachycaudus persicae</i>), Green Peach Aphid (<i>Myzus persicae</i>), Light Brown Apple Moth (<i>Epiphyas postvittana</i>), Oriental Fruit Moth (<i>Grapholita molesta</i>) and San Jose Scale (<i>Quadraspidotus perniciosus</i>) and suppression of Mediterranean Fruit Fly (<i>Ceratitis capitata</i>) and Queensland Fruit Fly (<i>Bactrocera tryoni</i>). Apply as a foliar spray from petal fall targeting crawlers when they become active in the canopy. Use a retreatment interval of 14 days. Maximum of 2 applications per season.	M Bee:M	R2
Petroleum Oil	-	Contact	1	A	ALL	Registered in stone fruit (except prunes) for control of San Jose Scale , Oyster Shell Scale, Bryobia Mite Eggs and European Mite Eggs. Apply as a foliar spray during dormant period up to bud swell. Retreatment interval and maximum number of applications per season not specified.	L Bee:L	R4

Pest / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Impact on beneficials	Regulatory risk
Spirotetramat (Movento) Bayer	23	Ingestion	21	A	ALL	Registered in stone fruit for control of Tuber Mealybug (<i>Pseudococcus virburni</i>), Longtailed Mealybug (<i>Pseudococcus longispinus</i>), Black Cherry Aphid (<i>Myzus cerasi</i>), Black Peach Aphid (<i>Brachycaudus persicae</i>) and San Jose Scale (<i>Quadraspidiotus perniciosus</i>). Apply as a foliar spray at the onset of crawler emergence. Use a minimum retreatment interval of 14 days. Maximum of 3 applications per crop, and a maximum of 2 applications made later than 21 days after shuck fall.	M Bee:L	R4
Acetamiprid + Pyriproxyfen (Trivor) Adama	4A+7C	Ingestion / IGR		P		Registered for control of various species of Scale in avocados, citrus, grapevines, macadamias and mangoes.	M Bee:H	R2
Buprofezin (Applaud) Corteva	16	Ingestion		P		Registered for control of Scale in citrus, custard apples, grapes, mangoes, passionfruit and persimmons.	M Bee:L	R4
Fenoxycarb (Insegar) Syngenta	7B	Contact & Ingestion		P		Registered for control of Scale in apples, pears and olives.	M Bee:L	R4
Flupyradifurone (Sivanto Prime) Bayer	4D	Contact & Ingestion		P		Registered for control of various insect pests in macadamias, avocados, mangoes, papaya and other tropical & sub-tropical fruits, inedible peel (excluding bananas, pineapple), olives, cucurbits, eggplant, peppers, tomatoes, green beans, potatoes and sweet potatoes. US registration for control of Scale Insects in citrus, pome fruit and stone fruit.	L Bee:L	R4

Pest / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Impact on beneficials	Regulatory risk
Dried Fruit Beetle (<i>Carpophilus spp.</i>) Priority: Moderate Dried Fruit Beetle is rated as a high priority in VIC and SA, and as a moderate priority in NSW. <i>Carpophilus</i> Beetles are serious pests of ripening stone fruit. They are attracted to and penetrate ripening fruit, causing substantial fruit losses. Insecticide options are limited.								
Ethanol, Ethyl acetate, 2-methyl-1-propanol, 2-methyl-1-butanol + Ethanol, Acetaldehyde (Carpophilus Catcha Trapping System)	-	Attract & Kill	NR	A	ALL	Registered in stone fruit for monitoring and control of Carpophilus Beetle . Contains 2 feeding attractants and an aggregation pheromone lure, which are prepared and/or placed into a trap. To be used in conjunction with Pest Strips containing dichlorvos. <u>For Monitoring:</u> Prior to fruit ripening, place 2 traps per block where block is <10ha, or 4 traps per block where block is >10ha. Install at eye level in the orchard. Replace co-attractants every 2 weeks. Do not use aggregation pheromones. <u>For population management:</u> Prior to fruit ripening, place 3 traps per ha. Install traps external to the orchard along the perimeter and placed upwind. Replace co-attractants every 2 weeks. Use aggregation pheromone lure.	VL Bee:VL	R4
Bifenthrin (Talstar)	3A	Contact	1	A	ALL	Registered in peaches, nectarines, plums and apricots for control of Carpophilus Beetles (<i>Carpophilus spp.</i>) Apply to the foliage and fruit before beetle populations reach damaging levels, as fruit is approaching maturity. Use a minimum retreatment interval of 10 days. Maximum of 2 applications per season.	VH Bee:H	R3
Clothianidin (Samurai) Sumitomo	4A	Contact & Ingestion	7 NG	A	ALL	Registered in stone fruit for control of Queensland Fruit Fly, Mediterranean Fruit Fly and Carpophilus Beetle . Apply as a foliar spray as fruit is ripening. Use a retreatment interval of 7 days. Maximum of 3 applications per season.	M Bee:VH	R2

Pest / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Impact on beneficials	Regulatory risk
Tetraniliprole (Vayego 200SC) Bayer	28	Ingestion	3 NG	A	ALL	Registered in stone fruit for control of Apple Weevil (<i>Otiorhynchus cribricollis</i>), Fuller's Rose Weevil (<i>Asynonychus cervinus</i>), Garden Weevil (<i>Phlyctinus callosus</i>), Oriental Fruit Moth (<i>Laspeyresia molesta</i> syn <i>Grapholita molesta</i>) and Mediterranean Fruit Fly (<i>Ceratitis capitata</i>) and suppression of Dried Fruit Beetles (<i>Carpophilus</i> spp.) Apply as a foliar spray as fruit approached maturity and before beetles reach damaging numbers. Use a retreatment interval of 10-14 days. Maximum of 3 applications per season.	L-M Bee:L	R4
Indoxacarb (Avatar)	22A	Ingestion	7 NG	P-A	ALL	Registered in stone fruits for control of Budworms (<i>Helicoverpa</i> spp.), Oriental Fruit Moth (<i>Grapholita molesta</i>), Inland Katydid (<i>Caedicia simplex</i>), Lightbrown Apple Moth (<i>E. postvittana</i>), Pear and Cherry Slug (<i>Caliroa cerasa</i>), Apple Weevil (<i>Otiorhynchus cribricollis</i>), Fuller's Rose Weevil (<i>Asynonychus cervinus</i>), Garden Weevil (<i>Phlyctinus callosus</i>) and Wingless Grasshopper (<i>Phaulacridium vittatum</i>) and suppression of European Earwig (<i>Forficula auriculari</i>). Registered for control of Monolepta Beetle in soybeans.	M Bee:H	R4
European Earwig (<i>Forficula auricularia</i>) Priority: Moderate								
European Earwig is rated as a high priority in VIC and SA, and as a moderate priority in NSW. Earwigs have chewing mouthparts and bite holes in young and ripening fruit and eat the flowers. The depressions on fruit caused by Earwig feeding can become infected by Brown Rot.								
Carbaryl	1A	Contact	35	A	ALL	Registered in apricots, nectarines, peaches, plums and prunes for control of Budworms (<i>Heliothis</i> spp.), Light Brown Apple Moth, Oriental Fruit Moth, Green Treehopper, Pear & Cherry Slug, Red Shouldered Leaf Beetle, Orange Fruit Borer, Wingless Grasshopper, Fruit-Tree Borer and European Earwig . Apply as a foliar spray at first sign of pest activity and repeat as necessary. Use a retreatment interval of 14 days. Maximum number of treatments per season not specified.	H Bee:H	R2

Pest / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Impact on beneficials	Regulatory risk
Indoxacarb (Avatar)	22A	Ingestion	7 NG	A	ALL	Registered in stone fruits for control of Budworms (<i>Helicoverpa</i> spp.), Oriental Fruit Moth (<i>Grapholita molesta</i>), Inland Katydid (<i>Caedicia simplex</i>), Lightbrown Apple Moth (<i>E. postvittana</i>), Pear and Cherry Slug (<i>Caliroa cerasa</i>), Apple Weevil (<i>Otiorhynchus cribricollis</i>), Fuller's Rose Weevil (<i>Asynonychus cervinus</i>), Garden Weevil (<i>Phlyctinus callosus</i>) and Wingless Grasshopper (<i>Phaulacridium vittatum</i>) and suppression of European Earwig (<i>Forficula auriculari</i>). Apply as a foliar spray when local thresholds have been reached. Use a minimum retreatment interval of 10 days. Maximum of 2 applications per season.	M Bee:H	R4
Broflanilide (Cimegra) BASF	30	Contact & Ingestion		P		Registered in brassica vegetables and Chinese cabbage for control of Diamondback Moth. Broad spectrum activity on soil-dwelling pests although specific effect on Earwigs is currently unknown.	H Bee:VH	R4
European Red Mite (<i>Panonychus ulmi</i>) Priority: Moderate European Red Mite is rated as a moderate priority in SA, and as a low priority in VIC and NSW. European Red Mite can become a pest when it causes stippling on leaves. An integrated management program should be used, including reduction of dust in the orchard, use of non-disruptive pesticides, avoidance of tree stress and biological agents.								
Bifenazate (Acramite)	20D	Contact & Ingestion	3 G:28	A	ALL	Registered in apricots, nectarines, peaches and plums for control of Two-Spotted Mite (<i>Tetranychus urticae</i>), European Red Mite (<i>Panonychus ulmi</i>) and Bryobia Mite (<i>Bryobia rubrioculus</i>). Apply as a foliar spray as soon as mites appear. Maximum of 1 application per season.	L Bee:H	R4
Clofentezine (Apollo)	10A	IGR / Contact	21	A	ALL	Registered in stone fruit for control of Two-Spotted Mite (<i>Tetranychus urticae</i>) and European Red Mite (<i>Panonychus ulmi</i>). Apply as a foliar spray when monitoring indicates that mite numbers require control. Maximum of 1 application per season.	L Bee:L	R4

Pest / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Impact on beneficials	Regulatory risk
Etiozazole (Paramite) Sumitomo	10B	IGR / Contact	7 NG	A	ALL	Registered in stone fruit (except cherries) for control of Two-Spotted Mite (<i>Tetranychus urticae</i>), European Red Mite (<i>Panonychus ulmi</i>) and Bryobia Mite (<i>Bryobia rubrioculus</i>). Apply as a foliar spray at the first sign of mite crawlers. Maximum of 1 application per season.	L Bee:VL	R4
Etiozazole + Piperonyl Butoxide (Motto RMR) Imtrade	10B	IGR / Contact	7	A	ALL	Registered in nectarines for control of Two-Spotted Mite (<i>Tetranychus urticae</i>) and European Red Mite (<i>Panonychus ulmi</i>). Apply as a foliar spray at the first sign of mite crawlers. Maximum of 1 application per season.	L Bee:VL	R4
Fenbutatin Oxide	12B	Contact	14	A	ALL	Registered in peaches and nectarines for control of Two-Spotted Mite (<i>Tetranychus urticae</i>), European Red Mite (<i>Panonychus ulmi</i>) and Bryobia Mite (<i>Bryobia rubrioculus</i>). Apply as a foliar spray when mite numbers warrant control. Retreatment interval and maximum number of applications not specified.	L Bee:L	R3
Fenbutatin Oxide + Hexythiazox (Sabamite) Sabachem	12B+10A	Contact	14	A	ALL	Registered in peaches and nectarines for control of Two-Spotted Mite (<i>Tetranychus urticae</i>) and European Red Mite (<i>Panonychus ulmi</i>). Apply as a foliar spray at first sign of mite activity. Maximum of 1 application per season.	L Bee:L	R3
Hexythiazox (Calibre)	10A	Contact	3	A	ALL	Registered in stone fruit for control of Two-Spotted Mite and European Red Mite . Apply as a foliar spray when mite numbers warrant control. Maximum of 1 application per season.	L Bee:L	R4
Malathion	1B	Contact	3	A	ALL	Registered in stone fruit for control of Black Peach Aphid, Green Peach Aphid, European Red Mite and Oriental Fruit Moth. Apply as a foliar spray at first sign of pest infestation. Retreatment interval not specified. Maximum of 4 applications per season.	H Bee:H	R4
Petroleum Oil	-	Contact	1	A	ALL	Registered in stone fruit (except prunes) for control of San Jose Scale, Oyster Shell Scale, Bryobia Mite Eggs and European Mite Eggs . Apply as a foliar spray during dormant period up to bud swell. Retreatment interval and maximum number of applications per season not specified.	L Bee:L	R4

Pest / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Impact on beneficials	Regulatory risk
Petroleum Oil (Heavy Dormant Spray Oil)	-	Contact	1	A	ALL	Registered in stone fruit for control of Bryobia Mite and European Red Mite (except WA). Apply as a foliar spray during dormant season up until bud swell. Retreatment interval and maximum number of applications per season not specified.	L Bee:L	R4
Propargite	12C	Contact	7	A	ALL	Registered in stonefruit for control of Two Spotted Mite and European Red Mite . Apply as a foliar spray as soon as mites appear. Retreatment interval not specified. Maximum of 2 applications per season.	M Bee:L	R3
Pyridaben (Sanmite)	10A	IGR / Contact	1	A	ALL	Registered in stonefruit for control of Two Spotted Mite (<i>Tetranychus urticae</i>) and European Red Mite (<i>Panonychus ulmi</i>). Apply as a foliar spray before the pest reaches damaging levels. Maximum of 1 application per season.	L Bee:L	R4
Tebufenpyrad (Pyranica) Sipcam	21A	Contact & Ingestion	14 NG	A	ALL	Registered in peaches for control of Two Spotted Mite (<i>Tetranychus urticae</i>) and European Red Mite (<i>Panonychus ulmi</i>). Apply as a foliar spray before mite infestation reached 70% of leaves infested. Retreatment interval and maximum number of applications per season not specified.	M Bee:H	R4
Cyantraniliprole + Diafenthiuron (Minecto Forte) Syngenta	28+12A	Ingestion		P		Registered for control of Two-Spotted Mite (<i>Tetranychus urticae</i>) in cucurbits and fruiting vegetables.	M Bee:VH	R4
Cyflumetofen (Danisaraba) BASF	25A	Contact		P		Registered for control of Two Spotted Mite (<i>Tetranychus urticae</i>) in pome fruit, almond, citrus, grapes, strawberries, fruiting vegetables and ornamentals.	L Bee:L	R4
Isocycloseram (Simodis) Syngenta	30	Ingestion		P		Registered for control of Two-Spotted Mite (<i>Tetranychus urticae</i>) in cucurbits and fruiting vegetables.	H Bee:VH	R4
Magnesium Hydroxide (Magnera) UPL	-	Contact		P		Registered for suppression of Two-Spotted Mite in tomatoes and cucurbits.	L Bee:L	R4

Pest / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Impact on beneficials	Regulatory risk
Orange Oil (Prev-Am) Oro Agri	-	Contact		P		Registered for control of Two-Spotted Mite (<i>Tetranychus urticae</i>) in tomato, eggplant, sugar snap peas, snow peas, raspberries, strawberries and cucurbits.	L Bee:L	R4
Western Flower Thrips (<i>Frankliniella occidentalis</i>) Plague Thrips (<i>Thrips imaginis</i>) Priority: Low Western Flower Thrips and Plague Thrips are rated as a moderate priority in VIC and SA, and as a low priority in NSW. Thrips cause damage to developing and ripening fruit. Tissue scarring and russetting occurs with larvae feeding on the developing fruit. This type of damage is usually caused by Plague Thrips. Western Flower Thrips usually cause fruit damage closer to harvest, leading to silver patches on the fruit surface or white patches around the stem end of the fruit.								
Methomyl	1A	Contact	1 NG	A	ALL	Registered in stonefruit, including nectarines and peaches for control of Thrips , Green Peach Aphid (<i>Myzus persicae</i>), Heliothis (<i>Helicoverpa</i> spp.) and Monolepta Beetle. Apply as a foliar spray at petal fall. Retreatment interval and maximum number of applications per season not specified.	H Bee:H	R2
Potassium Salts of Fatty Acid (Natrasoap)	-	Contact	NR	A	ALL	Registered in fruit for control of Aphids, Thrips , Mealybug, Two-Spotted Mite, Spider Mite and Whitefly. Apply as a cover spray. Retreatment interval and maximum number of treatments not specified.	L Bee:L	R4
Spinetoram (Delegate) Corteva	5	Ingestion	3 NG	A	ALL	Registered in stone fruit for control of Pear & Cherry Slug, Light Brown Apple Moth, Oriental Fruit Moth and Western Flower Thrips . Apply as a foliar spray, using 3 consecutive applications and using a retreatment interval of 3-5 days when temperatures are greater than 20°C, and 6-12 days when temperatures are less than 20°C. Maximum of 4 applications per season.	M Bee:H	R4

Pest / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Impact on beneficials	Regulatory risk
Spinosad (Entrust Organic) Corteva	5	Ingestion	3	A	ALL	Registered in stone fruit (excl. peaches) for control of Cherry Slug, Light Brown Apple Moth, Western Flower Thrips and Oriental Fruit Moth. Apply as a foliar spray, using 3 consecutive applications and using a retreatment interval of 3-5 days when temperatures are greater than 20°C, and 6-12 days when temperatures are less than 20°C. Maximum of 4 applications per season.	L Bee:L	R4
			7			Registered in peaches for control of Cherry Slug, Light Brown Apple Moth, Western Flower Thrips and Oriental Fruit Moth. Apply as a foliar spray, using 3 consecutive applications and using a retreatment interval of 3-5 days when temperatures are greater than 20°C, and 6-12 days when temperatures are less than 20°C. Maximum of 4 applications per season.		
Spirotetramat (Movento) Bayer PER84804	23	Ingestion	21	A	ALL (excl. VIC)	Permitted in stone fruit for control of Western Flower Thrips (<i>Frankliniella occidentalis</i>). Apply as a foliar spray at first sign of pest infestation. Use a minimum retreatment interval of 14 days. Maximum of 2 applications per crop.	M Bee:L	R4
Tau-Fluvalinate (Mavrik)	3A	Contact	NR	A	ALL	Registered in nectarines, peaches and plums for control of Plague Thrips (<i>Thrips imaginis</i>). Apply as a foliar spray just prior to or at the commencement of flowering when a significant population of thrips can be found. Use a retreatment interval of 10-14 days. Maximum of 2 non-consecutive applications per season.	VH Bee:H	R4
Acetamiprid + Pyriproxyfen (Trivor) Adama	4A+7C	Ingestion / IGR		P		Registered for control of Kelly's Citrus Thrips in citrus.	M Bee:H	R2
<i>Beauveria bassiana</i> (Velifer) BASF	UN			P		Registered for suppression of Onion Thrips and Western Flower Thrips in protected vegetables and ornamentals and has activity on Thrips, Aphids, Whitefly and Mites.	L Bee:L	R4

Pest / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Impact on beneficials	Regulatory risk
Cyantraniliprole (Benevia) FMC	28	Ingestion		P		Registered for suppression of Onion Thrips in bulb vegetables, Tomato Thrips and Western Flower Thrips in fruiting vegetables, Western Flower Thrips in cucurbits, Plague Thrips in potatoes, and Onion Thrips, Plague Thrips and Western Flower Thrips in strawberries.	L Bee:L	R4
Isocycloseram (Simodis) Syngenta	30	Ingestion		P		Registered for control of Diamond Back Moth, Cabbage White Butterfly and suppression of Heliothis in brassica vegetables and brassica leafy vegetables, suppression of Onion Thrips and Plague Thrips in bulb vegetables, control of Two Spotted Mite and Cucumber Moth and suppression of Broad Mite, Bean Red Spider Mite, Western Flower Thrips , Tomato Thrips, Melon Thrips, Plague Thrips and Heliothis in cucurbits, and control of Two Spotted Mite and Broad Mite and suppression of Tomato Russet Mite, Western Flower Thrips , Tomato Thrips, Melon Thrips, Plague Thrips and Heliothis in fruiting vegetables.	H Bee:VH	R4
Light Brown Apple Moth (<i>Epiphyas postvittana</i>) Oriental Fruit Moth (<i>Grapholita molesta</i>) Priority: Low Light Brown Apple Moth and Oriental Fruit Moth are rated as a moderate priority in SA, and as a low priority in VIC and NSW. The larvae of Light Brown Apple Moth cause damage to leaves and fruit. Oriental Fruit Moth larvae bore into fruit as it ripens, making it unsaleable. An integrated management program is required to control these caterpillar pests.								
(E,E) 8,10 Dodecadien-1-OL + Tetradecanol (Isomate-C/OFM)	-	Mating Disruption	NR	A	ALL	Registered in peach, nectarine, plum and apricot for management of Codling Moth and Oriental Fruit Moth . Apply dispensers immediately prior to the first moth emergence in spring.	VL Bee:VL	R4

Pest / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Impact on beneficials	Regulatory risk
Acetamiprid + Novaluron (Cormoran) Adama	4A+15	Contact & Ingestion	7 NG	A	ALL	Registered in stone fruit for control of Black Peach Aphid (<i>Brachycaudus persicae</i>), Green Peach Aphid (<i>Myzus persicae</i>), Light Brown Apple Moth (<i>Epiphyas postvittana</i>), Oriental Fruit Moth (<i>Grapholita molesta</i>) and San Jose Scale (<i>Quadraspidiotus perniciosus</i>) and suppression of Mediterranean Fruit Fly (<i>Ceratitis capitata</i>) and Queensland Fruit Fly (<i>Bactrocera tryoni</i>). Apply as a foliar spray targeting eggs and small larvae before they become entrenched. Use a retreatment interval of 14 days. Maximum of 2 applications per season.	M Bee:M	R2
<i>Bacillus thuringiensis subsp Kurstaki</i> Strain HD-1 (DiPel)	11A	Biological / Ingestion	NR	A	ALL	Registered in fruit for control of Armyworm (<i>Spodoptera</i> spp.), Cotton Bollworm (<i>Helicoverpa armigera</i>), Native Budworm (<i>Helicoverpa punctigera</i>), Cabbage Moth (<i>Plutella xylostella</i>), Cabbage White Butterfly (<i>Pieris rapae</i>), Green Looper (<i>Chrysodeixis eriosoma</i>), Light Brown Apple Moth (<i>Epiphyas postvittana</i>), Pear Looper (<i>Ectropis excursaria</i>), Soybean Looper (<i>Thysanoplusia orichalcea</i>), Vine Moth (<i>Phalaenoides glycinae</i> , <i>Agarista agricola</i>) and Tobacco Looper (<i>Chrysodeixis argentifera</i>). Time spraying to coincide with egg hatch. Treatments per season not limited.	VL Bee:VL	R4
Carbaryl	1A	Contact	35	A	ALL	Registered in apricots, nectarines, peaches, plums and prunes for control of Budworms (<i>Heliothis</i> spp.), Light Brown Apple Moth , Oriental Fruit Moth , Green Treehopper, Pear & Cherry Slug, Red Shouldered Leaf Beetle, Orange Fruit Borer, Wingless Grasshopper, Fruit-Tree Borer and European Earwig. Apply as a foliar spray at first sign of pest activity and repeat as necessary. Use a retreatment interval of 14 days. Maximum number of treatments per season not specified.	H Bee:H	R2

Pest / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Impact on beneficials	Regulatory risk
Chlorantraniliprole (Altacor) FMC	28	Ingestion	14 NG	A	ALL	Registered in stone fruit for control of Oriental Fruit Moth (<i>Grapholita molesta</i>) and Light Brown Apple Moth (<i>Epiphyas postvittana</i>). Apply as a foliar spray either before 110 degree days after detection of Oriental Fruit Moths in traps, or at 140 degree days after Light Brown Apple Moths are detected in traps. Use a minimum retreatment interval of 14 days. Maximum of 2 applications per season.	L Bee:VL	R4
Clothianidin (Samurai) Sumitomo	4A	Contact & Ingestion	7 NG	A	ALL	Registered in peaches and nectarines for control of Oriental Fruit Moth and Green Peach Aphid. Apply as a foliar spray when monitoring indicates that a generation egg hatch is taking place. Apply 2 consecutive sprays using a retreatment interval of 14 days. Maximum of 3 applications per season.	M Bee:VH	R2
<i>Cydia pomonella</i> Granulosis Virus V22 (Grandex Biological Insecticide)	-	Biological	NR	A	ALL	Registered in stone fruit for control of Oriental Fruit Moth (<i>Grapholita molesta</i>). Apply as a cover spray when newly hatched larvae are present in the orchard. Apply at 7-14 day intervals while larvae are present. Treatments per season not limited.	VL Bee:VL	R4
Indoxacarb (Avatar)	22A	Ingestion	7 NG	A	ALL	Registered in stone fruits for control of Budworms (<i>Helicoverpa</i> spp.), Oriental Fruit Moth (<i>Grapholita molesta</i>), Inland Katydid (<i>Caedicia simplex</i>), Lightbrown Apple Moth (<i>E. postvittana</i>), Pear and Cherry Slug (<i>Caliroa cerasi</i>), Apple Weevil (<i>Otiorhynchus cribricollis</i>), Fuller's Rose Weevil (<i>Asynonychus cervinus</i>), Garden Weevil (<i>Phlyctinus callosus</i>) and Wingless Grasshopper (<i>Phaulacridium vittatum</i>) and suppression of European Earwig (<i>Forficula auriculari</i>). Apply as a foliar spray either before 110 degree days after detection of Oriental Fruit Moths in traps, or at 140 degree days after Light Brown Apple Moths are detected in traps. Use a retreatment interval of 10-14 days. Maximum of 3 applications per season.	M Bee:H	R4

Pest / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Impact on beneficials	Regulatory risk
Malathion	1B	Contact	3	A	ALL	Registered in stone fruit for control of Black Peach Aphid, Green Peach Aphid, European Red Mite and Oriental Fruit Moth . Apply as a foliar spray at first sign of pest infestation. Retreatment interval not specified. Maximum of 4 applications per season.	H Bee:H	R4
Spinetoram (Delegate) Corteva	5	Ingestion	3 NG	A	ALL	Registered in stone fruit for control of Pear & Cherry Slug, Light Brown Apple Moth , Oriental Fruit Moth and Western Flower Thrips. Apply as a foliar spray targeted to mature eggs and newly hatched larvae. Use a retreatment interval of 14 days. Maximum of 4 applications per season.	M Bee:H	R4
Spinosad (Entrust Organic) Corteva	5	Ingestion	3	A	ALL	Registered in stone fruit (excl. peaches) for control of Cherry Slug, Light Brown Apple Moth , Western Flower Thrips and Oriental Fruit Moth . Apply as a foliar spray targeted to mature eggs and newly hatched larvae. Use a retreatment interval of 14 days. Maximum of 4 applications per season.	L Bee:L	R4
			7			Registered in peaches for control of Cherry Slug, Light Brown Apple Moth , Western Flower Thrips and Oriental Fruit Moth . Apply as a foliar spray targeted to mature eggs and newly hatched larvae. Use a retreatment interval of 7-14 days. Maximum of 4 applications per season.		
Tetraniliprole (Vayego 200SC) Bayer	28	Ingestion	3 NG	A	ALL	Registered in stone fruit for control of Apple Weevil (<i>Otiorhynchus cribricollis</i>), Fuller's Rose Weevil (<i>Asynonychus cervinus</i>), Garden Weevil (<i>Phlyctinus callosus</i>), Oriental Fruit Moth (<i>Laspeyresia molesta</i> syn <i>Grapholita molesta</i>) and Mediterranean Fruit Fly (<i>Ceratitis capitata</i>) and suppression of Dried Fruit Beetles (<i>Carpophilus</i> spp.) Apply as a foliar spray commencing post petal-fall and at egg hatch of a generational peak. Use a retreatment interval of 14-21 days. Maximum of 3 applications per season.	L-M Bee:L	R4

Pest / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Impact on beneficials	Regulatory risk
Thiacloprid	4A	Contact & Ingestion	14 NG	A	ALL	Registered in stone fruit (excl. peaches) for control of Oriental Fruit Moth . Apply as a foliar spray commencing at egg hatch of generational peak. Use a retreatment interval of 14 days. Maximum of 3 applications per season.	M Bee:VH	R2
			21 NG			Registered in peaches for control of Oriental Fruit Moth . Apply as a foliar spray commencing at egg hatch of generational peak. Use a retreatment interval of 14 days. Maximum of 3 applications per season.		
Broflanilide (Cimegra) BASF	30	Contact & Ingestion		P		Registered in brassica vegetables and Chinese cabbage for control of Diamondback Moth.	H Bee:VH	R4
Emamectin (Proclaim) Syngenta	6	Ingestion		P		Registered for control of Diamondback Moth, Cabbage White Butterfly, Heliothis, Cluster Caterpillar & Loopers in brassica vegetables, root & tuber vegetables (except potato), leafy vegetables and brassica leafy vegetables, Heliothis & Fall Armyworm in sweet corn, Cluster Caterpillar, Heliothis, Light Brown Apple Moth & Loopers in strawberries, Heliothis & Cluster Caterpillar in lettuce & fruiting vegetables, Heliothis, Cluster Caterpillar & Cucumber Moth in cucurbits, Heliothis, Cluster Caterpillar & Loopers in legume vegetables, and Light Brown Apple Moth & Grapevine Moth in grapes.	M Bee:H	R3
Isocycloseram (Simodis) Syngenta	30	Ingestion		P		Registered for control of Diamond Back Moth, Cabbage White Butterfly and suppression of Heliothis in brassica vegetables and brassica leafy vegetables, suppression of Onion Thrips and Plague Thrips in bulb vegetables, control of Two Spotted Mite and Cucumber Moth and suppression of Broad Mite, Bean Red Spider Mite, Western Flower Thrips, Tomato Thrips, Melon Thrips, Plague Thrips and Heliothis in cucurbits, and control of Two Spotted Mite and Broad Mite and suppression of Tomato Russet Mite, Western Flower Thrips, Tomato Thrips, Melon Thrips, Plague Thrips and Heliothis in fruiting vegetables.	H Bee:VH	R4

Pest / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Impact on beneficials	Regulatory risk
Methoxyfenozide (Prodigy) Corteva	18	Ingestion		P		Registered for control of Light Brown Apple Moth in apples, pears, blueberry, citrus, grapevines and kiwifruit.	VL Bee:VL	R4
Silver Peach Mite (<i>Aculus cornutus</i>) Priority: Low								
Silver Peach Mite is rated as a moderate priority in SA, and as a low priority in VIC and NSW. Silver Peach Mite is rarely a problem in prunes and dried tree fruit. Control is seldom required, as the mite eating ladybird <i>Stethorus</i> often keeps populations at low levels.								
Acequinocyl (Kanemite) UPL	20B	Contact & Ingestion	14 NG	P-A	ALL	Registered in stone fruit for control of Two-Spotted Mite (<i>Tetranychus urticae</i>).	L Bee:L	R4
Bifenazate (Acramite)	20D	Contact & Ingestion	3 G:28	P-A	ALL	Registered in apricots, nectarines, peaches and plums for control of Two-Spotted Mite (<i>Tetranychus urticae</i>), European Red Mite (<i>Panonychus ulmi</i>) and Bryobia Mite (<i>Bryobia rubrioculus</i>).	L Bee:H	R4
Clofentezine (Apollo)	10A	IGR / Contact	21	P-A	ALL	Registered in stone fruit for control of Two-Spotted Mite (<i>Tetranychus urticae</i>) and European Red Mite (<i>Panonychus ulmi</i>).	L Bee:L	R4
Etoxazole (Paramite) Sumitomo	10B	IGR / Contact	7 NG	P-A	ALL	Registered in stone fruit (except cherries) for control of Two-Spotted Mite (<i>Tetranychus urticae</i>), European Red Mite (<i>Panonychus ulmi</i>) and Bryobia Mite (<i>Bryobia rubrioculus</i>).	L Bee:VL	R4
Etoxazole + Piperonyl Butoxide (Motto RMR) Imtrade	10B	IGR / Contact	7	P-A	ALL	Registered in nectarines for control of Two-Spotted Mite (<i>Tetranychus urticae</i>) and European Red Mite (<i>Panonychus ulmi</i>).	L Bee:VL	R4
Fenbutatin Oxide	12B	Contact	14	P-A	ALL	Registered in peaches and nectarines for control of Two-Spotted Mite (<i>Tetranychus urticae</i>), European Red Mite (<i>Panonychus ulmi</i>) and Bryobia Mite (<i>Bryobia rubrioculus</i>).	L Bee:L	R3
Fenbutatin Oxide + Hexythiazox (Sabamite) Sabachem	12B+10A	Contact	14	P-A	ALL	Registered in peaches and nectarines for control of Two-Spotted Mite (<i>Tetranychus urticae</i>) and European Red Mite (<i>Panonychus ulmi</i>).	L Bee:L	R3

Pest / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Impact on beneficials	Regulatory risk
Hexythiazox (Calibre)	10A	Contact	3	P-A	ALL	Registered in stone fruit for control of Two-Spotted Mite and European Red Mite.	L Bee:L	R4
Milbemectin (Milbeknock) Sipcam	6	Ingestion	14 NG	P-A	ALL	Registered in stone fruit for control of Two Spotted Mite (<i>Tetranychus urticae</i>).	M Bee:VH	R4
Petroleum Oil	-	Contact	1	P-A	NSW & QLD	Registered in stone fruit (except prunes) for control of Two Spotted Mite.	L Bee:L	R4
Potassium Salts of Fatty Acid (Natrasoap)	-	Contact	NR	P-A	ALL	Registered in fruit for control of Aphids, Thrips, Mealybug, Two-Spotted Mite, Spider Mite and Whitefly.	L Bee:L	R4
Propargite	12C	Contact	7	P-A	ALL	Registered in stonefruit for control of Two Spotted Mite and European Red Mite.	M Bee:L	R3
Pyridaben (Sanmite)	10A	IGR / Contact	1	P-A	ALL	Registered in stonefruit for control of Two Spotted Mite (<i>Tetranychus urticae</i>) and European Red Mite (<i>Panonychus ulmi</i>).	L Bee:L	R4
Spiromesifen (Interrupt) Bayer	23	Ingestion	14 NG	P-A	ALL	Registered in stone fruit for control of Two Spotted Mite (<i>Tetranychus urticae</i>).	M Bee:VL	R4
Tebufenpyrad (Pyranica) Sipcam	21A	Contact & Ingestion	14 NG	P-A	ALL	Registered in peaches for control of Two Spotted Mite (<i>Tetranychus urticae</i>) and European Red Mite (<i>Panonychus ulmi</i>).	M Bee:H	R4
Cyflumetofen (Danisaraba) BASF	25A	Contact		P		Registered for control of Two Spotted Mite (<i>Tetranychus urticae</i>) in pome fruit, almond, citrus, grapes, strawberries, fruiting vegetables and ornamentals.	L Bee:L	R4
Cyantraniliprole + Diafenthiuron (Minecto Forte) Syngenta	28+12A	Ingestion		P		Registered for control of Two-Spotted Mite (<i>Tetranychus urticae</i>) in cucurbits and fruiting vegetables.	M Bee:VH	R4
Isocycloseram (Simodis) Syngenta	30	Ingestion		P		Registered for control of Two-Spotted Mite (<i>Tetranychus urticae</i>) in cucurbits and fruiting vegetables.	H Bee:VH	R4

Pest / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Impact on beneficials	Regulatory risk
Magnesium Hydroxide (Magnera) UPL	-	Contact		P		Registered for suppression of Two-Spotted Mite in tomatoes and cucurbits.	L Bee:L	R4
Orange Oil (Prev-Am) Oro Agri	-	Contact		P		Registered for control of Two-Spotted Mite (<i>Tetranychus urticae</i>) in tomato, eggplant, sugar snap peas, snow peas, raspberries, strawberries and cucurbits.	L Bee:L	R4
Black Peach Aphid (<i>Brachycaudus persicae</i>) Green Peach Aphid (<i>Myzus persicae</i>) Priority: Low Black Peach Aphid is rated as a moderate priority in VIC and SA, and as a low priority in NSW, and Green Peach Aphid is rated as a moderate priority in SA, and as a low priority in VIC and NSW. Aphids feed on leaves, extracting sap and causing leaves to yellow and drop. Honeydew produced by heavy aphid infestations can lead to development of sooty mould on the tree and fruit.								
Acetamiprid + Novaluron (Cormoran) Adama	4A+15	Contact & Ingestion	7 NG	A	ALL	Registered in stone fruit for control of Black Peach Aphid (<i>Brachycaudus persicae</i>), Green Peach Aphid (<i>Myzus persicae</i>), Light Brown Apple Moth (<i>Epiphyas postvittana</i>), Oriental Fruit Moth (<i>Grapholita molesta</i>) and San Jose Scale (<i>Quadraspidiotus perniciosus</i>) and suppression of Mediterranean Fruit Fly (<i>Ceratitis capitata</i>) and Queensland Fruit Fly (<i>Bactrocera tryoni</i>). Apply as a foliar spray when monitoring indicates pest numbers are above economic threshold. Retreatment interval not specified. Maximum of 2 applications per season.	M Bee:M	R2
Clothianidin (Samurai) Sumitomo	4A	Contact & Ingestion	7 NG	A	ALL	Registered in peaches and nectarines for control of Oriental Fruit Moth and Green Peach Aphid . Apply as a foliar spray when monitoring indicates control is necessary. Retreatment interval not specified. Maximum of 3 applications per season.	M Bee:VH	R2
Imidacloprid	4A	Contact & Ingestion	21 NG	A	ALL	Registered in stone fruit for control of Green Peach Aphid and Black Peach Aphid . Apply as a foliar spray at first sign of pest infestation. Retreatment interval not specified. Maximum of 3 applications per year.	M Bee:VH	R2

Pest / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Impact on beneficials	Regulatory risk
Malathion	1B	Contact	3	A	ALL	Registered in stone fruit for control of Black Peach Aphid , Green Peach Aphid , European Red Mite and Oriental Fruit Moth. Apply as a foliar spray at first sign of pest infestation. Retreatment interval not specified. Maximum of 4 applications per season.	H Bee:H	R4
Methomyl	1A	Contact	1 NG	A	ALL	Registered in stonefruit, including nectarines and peaches for control of Thrips, Green Peach Aphid (<i>Myzus persicae</i>), Heliothis (<i>Helicoverpa</i> spp.) and Monolepta Beetle. Apply as a foliar spray at petal fall. Retreatment interval and maximum number of applications per season not specified.	H Bee:H	R2
Pirimicarb (Pirimor)	1A	Contact	2	A	ALL	Registered in stone fruit for control of Green Peach Aphid , Black Peach Aphid and Cherry Aphid. Apply as a foliar spray at pink bud or when the pest appears. Retreatment interval not specified. Maximum of 2 applications per season. Do not apply consecutively.	VL Bee:VL	R4
Potassium Salts of Fatty Acid (Natrasoap)	-	Contact	NR	A	ALL	Registered in fruit for control of Aphids , Thrips, Mealybug, Two-Spotted Mite, Spider Mite and Whitefly. Apply as a cover spray. Retreatment interval and maximum number of treatments not specified.	L Bee:L	R4
Pymetrozine (Chess) Syngenta	9B	Contact & Ingestion	28	A	ALL	Registered in stone fruit for control of Black Peach Aphid (<i>Brachycaudus persicae</i>), Black Cherry Aphid (<i>Myzus cerasi</i>) and Green Peach Aphid (<i>Myzus persicae</i>). Apply as a foliar spray when local pest thresholds are reached. Use a minimum retreatment interval of 7 days. Maximum of 2 applications per crop.	L Bee:VL	R3

Pest / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Impact on beneficials	Regulatory risk
Spirotetramat (Movento) Bayer	23	Ingestion	21	A	ALL	Registered in stone fruit for control of Tuber Mealybug (<i>Pseudococcus virburni</i>), Longtailed Mealybug (<i>Pseudococcus longispinus</i>), Black Cherry Aphid (<i>Myzus cerasi</i>), Black Peach Aphid (<i>Brachycaudus persicae</i>) and San Jose Scale (<i>Quadraspidiotus perniciosus</i>). Apply as a foliar spray when pest numbers reach economic threshold. Apply a second application using a retreatment interval of 14-21 days if required. Maximum of 3 applications per crop, and a maximum of 2 applications made later than 21 days after shuck fall.	M Bee:L	R4
Sulfoxaflor (Transform) Corteva	4C	Contact & Ingestion	7	A	ALL	Registered in stone fruit for control of Apple Dimpling Bug, Black Peach Aphid , Cherry Aphid and Green Peach Aphid . Apply as a foliar spray when pest reaches threshold level. Use a retreatment interval of 14 days. Maximum of 4 applications per season. Do not apply consecutive applications.	M Bee:VH	R4
Afidopyropen (Versys) BASF	9D	Ingestion		P		Registered for control of aphids, including Green Peach Aphid (<i>Myzus persicae</i>) in sweet corn, rhubarb, artichokes, brassica vegetables, celery, cucurbits, fruiting vegetables, strawberry, leafy vegetables and brassica leafy vegetables.	L Bee:L	R4
<i>Beauveria bassiana</i> (Velifer) BASF	UN	Biological		P		Registered for suppression of various Aphids in protected vegetables and ornamentals.	L Bee:L	R4
Cyantraniliprole (Benevia) FMC	28	Ingestion		P		Registered for suppression/control of Green Peach Aphid in fruiting vegetables, potatoes and strawberries.	L Bee:L	R4
Dimpropridaz (Efficon) BASF	UN	Ingestion		P		Registered for control of Cotton/Melon Aphid (<i>Aphis gossypii</i>) in cucurbits, and Green Peach Aphid (<i>Myzus persicae</i>) and Cabbage Aphid (<i>Brevicoryne brassicae</i>) in brassica vegetables, leafy vegetables and brassica leafy vegetables.	M Bee:L	R4

Pest / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Impact on beneficials	Regulatory risk
Flonicamid (Mainman) UPL	29	Ingestion		P		Registered for control of Green Peach Aphid (<i>Myzus persicae</i>) in cucurbits, potatoes and strawberries, and Melon Aphid (<i>Aphis gossypii</i>) in cucurbits and potatoes, and Potato Aphid in potatoes.	M Bee:VL	R4
Flupyradifurone (Sivanto Prime) Bayer	4D	Contact & Ingestion		P		Registered for control of Cotton Aphid (<i>Aphis gossypii</i>) and Green Peach Aphid (<i>Myzus persicae</i>) in cucurbits, eggplant, peppers and tomatoes, and Green Peach Aphid (<i>Myzus persicae</i>) in green beans, potatoes and sweet potatoes.	L Bee:L	R4
Root Lesion Nematode (<i>Pratylenchus spp.</i>)								
Priority: Low								
Root Lesion Nematode is rated as a moderate priority in SA, and as a low priority in VIC and NSW. Nematodes are soil dwelling organisms that penetrate roots and cause poor vigour, stunting and occasional tree death.								
1,3-Dichloropropene	-	Soil Fumigant	NR	A	ALL	Registered as a soil fumigant for control of plant parasitic Nematodes . Restricted chemical. <i>For use by professional and registered fumigators only.</i>	-	R4
Chloropicrin + 1,3-Dichloropropene	8B	Soil Fumigant	NR	A	ALL	Registered in fruit crops as a soil fumigant for control of plant parasitic Nematodes , Symphylans, Wireworms, soil borne diseases (including <i>Fusarium</i> and <i>Verticillium</i> wilts, <i>Rhizoctonia</i> , <i>Pythium</i>) and suppression of weeds. Restricted chemical. <i>For use by professional and registered fumigators only.</i>	-	R4
Abamectin (Tervigo) Syngenta	N-2	Contact		P		Registered for control of Root Knot Nematode in fruiting vegetables, cucurbits, potato and sweet potato.	M Bee:H	R3
Cadusafos (Rugby)	1B	Contact		P		Registered for control of Nematodes in banana, citrus, ginger, sugar cane, tobacco and tomato.	H Bee:H	R4
Cyclobutrifluram (Vaniva Tymirium) Syngenta	N-3	Contact		P		Registered for control of Root-Knot Nematode in fruiting vegetables and cucurbits.	L Bee:L	R4
Fenamiphos (Nemacur)	1B	Contact		P		Registered for control of Nematodes in aloe vera and bananas.	H Bee:H	R3

Pest / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Impact on beneficials	Regulatory risk
Fluazaindolizine (Salibro ReKlemel) Corteva	N-UN	Contact		P	ALL	Registered in for control of Nematodes in cucurbits, fruiting vegetables, root & tuber vegetables and sweet potato.	-	R4
Fluensulfone (Nimitz) Adama	N-UN	Contact		P	ALL	Registered for control of Root Knot Nematode in cucurbits, fruiting vegetables, carrots, potato, sweet potato and sugarcane.	L Bee:L	R4
Fluopyram (Velum Prime) Bayer	N-3	Contact		P		Registered for control of Root-Knot Nematode (<i>Meloidogyne</i> spp.) in root & tuber vegetables.	L Bee:L	R4
Oxamyl (Vydate) Corteva	1A	Contact		P		Registered for control of Nematodes in bananas, capsicum, tomatoes and sweet potatoes.	H Bee:H	R4
Terbufos (Counter)	1B	Contact		P		Registered for control of Burrowing Nematode and Spiral Nematode in bananas.	H Bee:H	R3
Peach White Scale (<i>Pseudaulacaspis pentagona</i>) Priority: Low								
Peach White Scale is rated as a moderate priority in SA, and as a low priority in VIC and NSW. Peach White Scale damages the tree by feeding on twigs, branches and fruit. In extreme cases entire trees can be killed. Good orchard sanitation and the use of cover sprays are required to manage this pest.								
Acetamiprid + Novaluron (Cormoran) Adama	4A+15	Contact & Ingestion	7 NG	P-A	ALL	Registered in stone fruit for control of Black Peach Aphid (<i>Brachycaudus persicae</i>), Green Peach Aphid (<i>Myzus persicae</i>), Light Brown Apple Moth (<i>Epiphyas postvittana</i>), Oriental Fruit Moth (<i>Grapholita molesta</i>) and San Jose Scale (<i>Quadraspidiotus perniciosus</i>) and suppression of Mediterranean Fruit Fly (<i>Ceratitis capitata</i>) and Queensland Fruit Fly (<i>Bactrocera tryoni</i>).	M Bee:M	R2
Petroleum Oil	-	Contact	1	P-A	ALL	Registered in stone fruit (except prunes) for control of San Jose Scale, Oyster Shell Scale, Bryobia Mite Eggs and European Mite Eggs.	L Bee:L	R4
Petroleum Oil (Heavy Dormant Spray Oil)	-	Contact	1	P-A	ALL (excl. TAS)	Registered in stone fruit for control of San Jose Scale.	L Bee:L	R4

Pest / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Impact on beneficials	Regulatory risk
Spirotetramat (Movento) Bayer	23	Ingestion	21	P-A	ALL	Registered in stone fruit for control of Tuber Mealybug (<i>Pseudococcus virburni</i>), Longtailed Mealybug (<i>Pseudococcus longispinus</i>), Black Cherry Aphid (<i>Myzus cerasi</i>), Black Peach Aphid (<i>Brachycaudus persicae</i>) and San Jose Scale (<i>Quadraspidiotus perniciosus</i>).	M Bee:L	R4
Acetamiprid + Pyriproxyfen (Trivor) Adama	4A+7C	Ingestion / IGR		P		Registered for control of various species of Scale in avocados, citrus, grapevines, macadamias and mangoes.	M Bee:H	R2
Buprofezin (Applaud) Corteva	16	Ingestion		P		Registered for control of Scale in citrus, custard apples, grapes, mangoes, passionfruit and persimmons.	M Bee:L	R4
Fenoxycarb (Insegar) Syngenta	7B	Contact & Ingestion		P		Registered for control of Scale in apples, pears and olives.	M Bee:L	R4
Flupyradifurone (Sivanto Prime) Bayer	4D	Contact & Ingestion		P		Registered for control of various insect pests in macadamias, avocados, mangoes, papaya and other tropical & sub-tropical fruits, inedible peel (excluding bananas, pineapple), olives, cucurbits, eggplant, peppers, tomatoes, green beans, potatoes and sweet potatoes. US registration for control of Scale Insects in citrus, pome fruit and stone fruit.	L Bee:L	R4
Rutherglen Bug (<i>Nysius vinitor</i>) Priority: Low Rutherglen Bug is rated as a low priority in VIC, SA and NSW. Rutherglen Bug breed on weeds adjacent to cropping areas. It is important to monitor crops for eggs and nymphs by regular field scouting. Large numbers can cause significant feeding damage to foliage by sucking the sap and depleting the crop of nutrients.								
Pyrethrins (Pyganic)	3A	Contact	NR	A	ALL	Registered in stone fruit as a clean up spray to control insects prior to harvest such as Fruit Fly, Rutherglen Bug and Spiders. Apply as a foliar spray.	VH Bee:H	R4

Pest / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Impact on beneficials	Regulatory risk
Trichlorfon	1B	Contact	2 NG	A	NSW, VIC, TAS, SA & WA	Registered in stone fruit for control of Rutherglen Bug . Apply as a foliar spray when pest outbreak occurs. Retreatment interval and maximum number of applications per season not specified.	H Bee:H	R3
Sulfoxaflor (Transform) Corteva	4C	Contact & Ingestion	7	P-A	ALL	Registered in stone fruit for control of Apple Dimpling Bug, Black Peach Aphid, Cherry Aphid and Green Peach Aphid. Registered for suppression of Rutherglen Bug in cucurbits, fruiting vegetables, leafy vegetables, root & tuber vegetables, brassica vegetables, cane berries and strawberries.	M Bee:VH	R4
Flonicamid (Mainman) UPL	29	Ingestion		P		Registered for control of mirids in strawberries and nursery stock.	M Bee:VL	R4
Flupyradifurone (Sivanto Prime) Bayer	4D	Contact & Ingestion		P		Registered for control of various insect pests in macadamias, avocados, mangoes, papaya and other tropical & sub-tropical fruits, inedible peel (excluding bananas, pineapple), olives, cucurbits, eggplant, peppers, tomatoes, green beans, potatoes and sweet potatoes.	L Bee:L	R4
Snails (<i>Gastropoda</i> spp.) Priority: Low Snails are rated as a moderate priority in SA, and as a low priority in VIC and NSW. Snails cause direct feeding damage to fruit leading to reduced yields or marketability. Molluscicides can be used as a broadcast across the orchard or applied to localised areas of infestation.								
Metaldehyde	-	Bait	7	A	ALL	Registered in horticultural crops for control of Snails and Slugs. Broadcast evenly over the ground where snails and slugs are active or incorporate with seed when direct drilling. Treatments per season not limited.	-	R4

4.3 Weeds in prune and dried tree fruit

4.3.1 Weed priorities

Common Name	Scientific Name
High	
Flaxleaf Fleabane	<i>Conyza bonariensis</i>
Wireweed	<i>Polygonum aviculare</i>
Caltrop	<i>Tribulus terrestris</i>
Nutgrass	<i>Cyperus rotundus</i>
Moderate	
Feathertop Rhodes Grass	<i>Chloris virgata</i>
Marshmallow	<i>Malva parviflora</i>
Annual Ryegrass	<i>Lolium rigidum</i>
Couch Grass	<i>Cynodon dactylon</i>
Fat Hen	<i>Chenopodium album</i>
Capeweed	<i>Arctotheca calendula</i>
Barnyard Grass	<i>Echinochloa colona</i>
Paspalum	<i>Paspalum dilatatum</i>
Liverseed Grass	<i>Urochloa panicoides</i>
Barley Grass	<i>Hordeum</i> spp.
Johnson Grass	<i>Sorghum halepense</i>
Sowthistle	<i>Sonchus oleraceus</i>
Pigweed	<i>Portulaca</i> spp.
Blackberry Nightshade	<i>Solanum nigrum</i>
Silverleaf Nightshade	<i>Solanum elaeagnifolium</i>
Morning Glory	<i>Ipomoea purpurea</i>

An integrated weed management program should be used to reduce the need for herbicides in crops. The high priority weeds across the prunes and dried tree fruit industries are Flaxleaf Fleabane, Wireweed, Caltrop and Nutgrass. These are invasive species which are difficult to kill and must be managed using a sustained management program incorporating multiple control measures. Herbicide options are listed in Appendix 3.

Resistance management

Specific resistance management strategies for high resistance risk (1 and 2) and moderate resistance risk (3, 4, 5, 6, 9, 10, 12, 13, 14, 15, 18, 19, 22, 23, 27, 29, 30, 31, 34 and 0) herbicide modes of action are available on the CropLife Australia webpage⁸.

⁸ <https://www.croplife.org.au/resources/programs/resistance-management/herbicide-resistance-management-strategies-2/>

4.3.2 Available and potential products for weed control

TABLE KEY: Note that blank fields in the table indicate no information has been provided.

Availability			
A	Available via either registration or permit approval		
P	Potential – a possible candidate to pursue for registration or permit		
P-A	Potential, already approved in the crop for another use		
Resistance risk		Regulatory risk (refer to Appendix 6)	
***	High resistance risk	R1	Short-term risk: Critical concern over retaining access < 1 year
		R2	Medium-term risk: Maintaining access of significant concern <2-5 years
**	Moderate resistance risk	R3	Long-term: Potential issues associated with use - Monitoring required < 5 years
		R4	No current risk / concerns
Withholding Period (WHP) – Number of days from last treatment to harvest (H) or Grazing (G)			
Harvest	H	Not Required when used as directed	NR
Grazing	G	No Grazing Permitted	NG

Active Ingredient (Trade Name)	Chemical Group	Crop / Situation	Comment / Use / Weed	WHP (days)	Availability	States	Regulatory risk
Flaxleaf Fleabane (<i>Conyza bonariensis</i>) Priority: High Flaxleaf Fleabane is rated as a high priority in VIC, SA and NSW. Flaxleaf Fleabane is a widespread weed that is difficult to control with herbicides. It seeds prolifically and can germinate year-round. Weed control should be targeted at small, actively growing weeds and usually multiple applications will be required. A combination of residual and knockdown herbicides should form part of an integrated approach to managing Flaxleaf Fleabane.							
Amitrole	34**	Vineyards & Orchards / Directed Spray	Registered in vineyards and orchards for control of broadleaf weeds and grasses. Apply as a directed spray to small, actively growing weeds.	56	A	ALL	R3
Carfentrazone-ethyl + Glufosinate-ammonium (Hellcat) AgNova	14**+ 10**	Stone Fruit / Directed Spray	Registered in stone fruit for control of grass and broadleaf weeds, including Flaxleaf Fleabane . Apply as a directed spray when weeds are young and actively growing.	21 G:56	A	ALL	R3

Active Ingredient (Trade Name)	Chemical Group	Crop / Situation	Comment / Use / Weed	WHP (days)	Availability	States	Regulatory risk
Dichlobenil (Casoran)	29**	Orchards, including apples, apricots, citrus, peaches, plums & vineyards / Pre-Emergent Weed Control	Registered in orchards for control of annual grass and broadleaf weeds. Spread granules evenly over bare soil to be treated.	NR	A	ALL	R4
Flumioxazin (Chateau)	14	Stone Fruit / Directed Spray / Residual Weed Control	Registered in stone fruit for control of grass and broadleaf weeds, including Flaxleaf Fleabane . Apply to bare soil using a directed spray at the base of the bushes. At least 15mm of irrigation or rainfall is required to activate the herbicide. Best application is during the period following final harvest up to bud break. Avoid direct or indirect spray contact to foliage, fruit and green bark. Do not apply to trees established in the orchard for less than 1 year.	98	A	ALL	R4
Glufosinate-ammonium (Basta)	10**	Stone Fruit Orchards / directed or shielded spray	Registered in stone fruit orchards for control of various grass and broadleaf weeds, including Flaxleaf Fleabane (<i>Conyza bonariensis</i>). Do not allow spray to contact any part of the tree, including the trunk.	21 G:56	A	ALL	R3
Glufosinate-P-ammonium (Basta Ultra) BASF	10**	Stone Fruit Orchards / directed or shielded spray	Registered in stone fruit orchards for control of various grass and broadleaf weeds, including Flaxleaf Fleabane (<i>Conyza bonariensis</i>). Do not allow spray to contact any part of the tree, including the trunk.	21 G:56	A	ALL	R3
Aclonifen (Emerger) Bayer	32**		Bayer is expected to seek registration for pre-emergent control of grass and broadleaf weeds in various crops. Registered in Europe for use in potatoes, legume vegetables and cereals.		P		R4
Dimethenamid-P (Outlook)	15**		Registered for pre-emergent control of grass and broadleaf weeds in sweet corn, beans, peas, pumpkins and kabocha.		P		R4
Saflufenacil (Sharpen) BASF	14**		Registered for control of Flaxleaf Fleabane in citrus, pome fruit & almonds.		P		R4
S-Metolachlor (Dual Gold) Syngenta	15**		Registered for control of grass and broadleaf weeds in Brassica vegetables, Brassica leafy vegetables, sweet potatoes, spring onions, shallots, spinach, silverbeet, rhubarb, culinary herbs and beans.		P		R4

Active Ingredient (Trade Name)	Chemical Group	Crop / Situation	Comment / Use / Weed	WHP (days)	Availability	States	Regulatory risk
Wireweed (<i>Polygonum aviculare</i>) Priority: High							
Wireweed is rated as a high priority in SA and NSW, and as a moderate priority in VIC. Wireweed grows rapidly in the warmer months and is difficult to control with herbicides. Application timing is critical to ensure small weeds are targeted.							
Amitrole	34**	Vineyards & Orchards / Directed Spray	Registered in vineyards and orchards for control of broadleaf weeds and grasses. Apply as a directed spray to small, actively growing weeds.	56	A	ALL	R3
Carfentrazone-ethyl + Glufosinate-ammonium (Hellcat) AgNova	14**+ 10**	Stone Fruit / Directed Spray	Registered in stone fruit for control of grass and broadleaf weeds, including Wireweed . Apply as a directed spray when weeds are young and actively growing.	21 G:56	A	ALL	R3
Dichlobenil (Casoran)	29**	Orchards, including apples, apricots, citrus, peaches, plums & vineyards / Pre-Emergent Weed Control	Registered in orchards for control of annual grass and broadleaf weeds. Spread granules evenly over bare soil to be treated.	NR	A	ALL	R4
Glufosinate-ammonium (Basta)	10**	Stone Fruit Orchards / directed or shielded spray	Registered in stone fruit orchards for control of various grass and broadleaf weeds, including Wireweed (<i>Polygonum aviculare</i>). Do not allow spray to contact any part of the tree, including the trunk.	21 G:56	A	ALL	R3
Glufosinate-P-ammonium (Basta Ultra) BASF	10**	Stone Fruit Orchards / directed or shielded spray	Registered in stone fruit orchards for control of various grass and broadleaf weeds, including Wireweed (<i>Polygonum aviculare</i>). Do not allow spray to contact any part of the tree, including the trunk.	21 G:56	A	ALL	R3
Isoxaben (Gallery)	29**	Tree Fruits Residual Weed Control	Registered in tree fruits for control of broadleaf weeds, including Wireweed . Apply to bare soil prior to weed emergence. Rainfall or irrigation is required within 21 days to activate the herbicide. Maximum of 2 applications per year.	NR	A	ALL	R4

Active Ingredient (Trade Name)	Chemical Group	Crop / Situation	Comment / Use / Weed	WHP (days)	Availability	States	Regulatory risk
Norflurazon (Zoliar)	12**	Stone Fruit (apricots, cherries, nectarines, peaches, plums) / Directed Spray / Residual Weed Control	Registered in stone fruit for control of grass and broadleaf weeds, including Wireweed . Apply as a directed spray to bare ground prior to emergence. Avoid contact with foliage or fruit. Do not apply to trees that have been established for less than 18 months.	NR	A	ALL	R4
Oryzalin	3**	Stone Fruit (apricot, cherry, nectarine, peach, plum & prune) / Directed Spray	Registered in stone fruit for control of grass & broadleaf weeds, including Wireweed . Apply to bare soil using a directed spray at the base of the trees. Requires at least 15mm of irrigation or rain to activate.	NR	A	ALL	R4
Oxyfluorfen (Goal)	14**	Stone Fruit / Directed Spray	Registered in stone fruit for control of grass and broadleaf weeds, including Wireweed . If weeds are already present, use as a spike in a mixture with glyphosate.	NR NG	A	ALL	R4
Pendimethalin (Stomp)	3**	Deciduous Fruits / Directed Spray / Residual Weed Control	Registered in deciduous fruit for control of grass and broadleaf weeds, including Wireweed . Apply to soil surface that is free of weeds, surface litter and clods, and ensure incorporation by a minimum of 5mm of rainfall or spray irrigation within 10 days.	NR	A	ALL	R4
Trifluralin	3**	Orchards & Vineyards / Pre- emergence Residual	Registered in orchards and vineyards for control of grass and broadleaf weeds, including Wireweed . Apply to new plantings during pre-plant cultivation or to established crops in spring after weeds and green manure crops have been ploughed in.	NR	A	QLD, VIC, TAS, SA & WA	R4
Aclonifen (Emerger) Bayer	32**		Bayer is expected to seek registration for pre-emergent control of grass and broadleaf weeds in various crops. Registered in Europe for use in potatoes, legume vegetables and cereals.		P		R4
Dimethenamid-P (Outlook)	15**		Registered for pre-emergent control of grass and broadleaf weeds in sweet corn, beans, peas, pumpkins and kabocha.		P		R4

Active Ingredient (Trade Name)	Chemical Group	Crop / Situation	Comment / Use / Weed	WHP (days)	Availability	States	Regulatory risk
S-Metolachlor (Dual Gold) Syngenta	15**		Registered for control of grass and broadleaf weeds in Brassica vegetables, Brassica leafy vegetables, sweet potatoes, spring onions, shallots, spinach, silverbeet, rhubarb, culinary herbs and beans.		P		R4
Caltrop (<i>Tribulus terrestris</i>) Priority: High Caltrop is rated as a high priority in VIC, SA and NSW. Caltrop is an annual, summer-growing broadleaf that grows as a vine and has sharp spines on the fruiting structures. Established plants develop a strong taproot making herbicide control difficult.							
Amitrole	34**	Vineyards & Orchards / Directed Spray	Registered in vineyards and orchards for control of broadleaf weeds and grasses. Apply as a directed spray to small, actively growing weeds.	56	A	ALL	R3
Carfentrazone-ethyl + Glufosinate-ammonium (Hellcat) AgNova	14**+ 10**	Stone Fruit / Directed Spray	Registered in stone fruit for control of grass and broadleaf weeds, including Caltrop . Apply as a directed spray when weeds are young and actively growing.	21 G:56	A	ALL	R3
Dichlobenil (Casoran)	29**	Orchards, including apples, apricots, citrus, peaches, plums & vineyards / Pre-Emergent Weed Control	Registered in orchards for control of annual grass and broadleaf weeds. Spread granules evenly over bare soil to be treated.	NR	A	ALL	R4
Glufosinate-ammonium (Basta)	10**	Stone Fruit Orchards / directed or shielded spray	Registered in stone fruit orchards for control of various grass and broadleaf weeds, including Caltrop Burr (<i>Tribulus terrestris</i>). Do not allow spray to contact any part of the tree, including the trunk.	21 G:56	A	ALL	R3
Glufosinate-P-ammonium (Basta Ultra) BASF	10**	Stone Fruit Orchards / directed or shielded spray	Registered in stone fruit orchards for control of various grass and broadleaf weeds, including Caltrop Burr (<i>Tribulus terrestris</i>). Do not allow spray to contact any part of the tree, including the trunk.	21 G:56	A	ALL	R3
Glyphosate	9**	Stone Fruit / directed spray, shielded spray or wick wiper	Registered in stone fruit for control of various grass and broadleaf weeds, including Caltrop . Do not allow spray to contact any part of the tree, including the trunk.	NR	A	ALL	R3

Active Ingredient (Trade Name)	Chemical Group	Crop / Situation	Comment / Use / Weed	WHP (days)	Availability	States	Regulatory risk
Isoxaben (Gallery)	29**	Tree Fruits / Residual Weed Control	Registered in tree fruits for control of broadleaf weeds, including Caltrop . Apply to bare soil prior to weed emergence. Rainfall or irrigation is required within 21 days to activate the herbicide. Maximum of 2 applications per year.	NR	A	ALL	R4
Norflurazon (Zoliar)	12**	Stone Fruit (apricots, cherries, nectarines, peaches, plums) / Directed Spray / Residual Weed Control	Registered in stone fruit for control of grass and broadleaf weeds, including Caltrop . Apply as a directed spray to bare ground prior to emergence. Avoid contact with foliage or fruit. Do not apply to trees that have been established for less than 18 months.	NR	A	ALL	R4
Oryzalin	3**	Stone Fruit (apricot, cherry, nectarine, peach, plum & prune) / Directed Spray	Registered in stone fruit for control of grass & broadleaf weeds, including Caltrop . Apply to bare soil using a directed spray at the base of the trees. Requires at least 15mm of irrigation or rain to activate.	NR	A	ALL	R4
Oxyfluorfen (Goal)	14**	Stone Fruit / Directed Spray	Registered in stone fruit for control of grass and broadleaf weeds, including Caltrop . If weeds are already present, use as a spike in a mixture with glyphosate.	NR NG	A	ALL	R4
Pendimethalin (Stomp) + Simazine	3** + 5**	Deciduous Fruits / Directed Spray / Residual Weed Control	Registered in deciduous fruit for control of grass and broadleaf weeds, including Caltrop . Apply to soil surface that is free of weeds, surface litter and clods, and ensure incorporation by a minimum of 5mm of rainfall or spray irrigation within 10 days.	NR	A	ALL	R4
Trifluralin	3**	Orchards & Vineyards	Registered in orchards and vineyards for control of grass and broadleaf weeds, including Caltrop . Apply to new planting during pre-plant cultivation, or to established crops in spring after weeds and green manure crop have been incorporated into ground.	NR	A	QLD, VIC, TAS, SA & WA	R4
Aclonifen (Emerger) Bayer	32**		Bayer is expected to seek registration for pre-emergent control of grass and broadleaf weeds in various crops. Registered in Europe for use in potatoes, legume vegetables and cereals.		P		R4

Active Ingredient (Trade Name)	Chemical Group	Crop / Situation	Comment / Use / Weed	WHP (days)	Availability	States	Regulatory risk
Dimethenamid-P (Outlook)	15**		Registered for pre-emergent control of grass and broadleaf weeds in sweet corn, beans, peas, pumpkins and kabocha.		P		R4
S-Metolachlor (Dual Gold) Syngenta	15**		Registered for control of grass and broadleaf weeds in Brassica vegetables, Brassica leafy vegetables, sweet potatoes, spring onions, shallots, spinach, silverbeet, rhubarb, culinary herbs and beans.		P		R4
Feathertop Rhodes Grass (<i>Chloris virgata</i>) Priority: Moderate							
Feathertop Rhodes Grass is rated as a high priority in SA, and as a moderate priority in VIC and NSW. Feathertop Rhodes Grass is an aggressive grass weed that is difficult to control with herbicides. Multiple applications are required.							
2,2-DPA Dalapon	0**	Peaches / Apricots	Registered in peaches and apricots for control of annual and perennial grasses. Apply as a directed spray using a handgun in established orchards.	7	A	ALL	R4
Amitrole	34**	Vineyards & Orchards / Directed Spray	Registered in vineyards and orchards for control of broadleaf weeds and grasses. Apply as a directed spray to small, actively growing weeds.	56	A	ALL	R3
Clethodim	1***	Fruit Trees / Non- Bearing	Registered in non-bearing fruit trees for control of grass weeds, including Feather Top Rhodes Grass seedlings. Apply as a directed spray to young, actively growing weeds	NR	A	ALL	R4
Dichlobenil (Casoran)	29**	Orchards, including apples, apricots, citrus, peaches, plums & vineyards / Pre-Emergent Weed Control	Registered in orchards for control of annual grass and broadleaf weeds. Spread granules evenly over bare soil to be treated.	NR	A	ALL	R4
Flumioxazin (Chateau)	14	Stone Fruit / Directed Spray / Residual Weed Control	Registered in stone fruit for control of grass and broadleaf weeds, including Feathertop Rhodes Grass . Apply to bare soil using a directed spray at the base of the bushes. At least 15mm of irrigation or rainfall is required to activate the herbicide. Best application is during the period following final harvest up to bud break. Avoid direct or indirect spray contact to foliage, fruit and green bark. Do not apply to trees established in the orchard for less than 1 year.	98	A	ALL	R4

Active Ingredient (Trade Name)	Chemical Group	Crop / Situation	Comment / Use / Weed	WHP (days)	Availability	States	Regulatory risk
Aclonifen (Emerger) Bayer	32**		Bayer is expected to seek registration for pre-emergent control of grass and broadleaf weeds in various crops. Registered in Europe for use in potatoes, legume vegetables and cereals.		P		R4
Dimethenamid-P (Outlook)	15**		Registered for pre-emergent control of grass and broadleaf weeds in sweet corn, beans, peas, pumpkins and kabocha.		P		R4
S-Metolachlor (Dual Gold) Syngenta	15**		Registered for control of grass and broadleaf weeds in Brassica vegetables, Brassica leafy vegetables, sweet potatoes, spring onions, shallots, spinach, silverbeet, rhubarb, culinary herbs and beans.		P		R4
Marshmallow (<i>Malva parviflora</i>) Priority: Moderate Marshmallow is rated as a high priority in NSW, and as a moderate priority in VIC and SA. Marshmallow is adapted to a wide variety of environments and highly competitive weed. Control with knockdown herbicides can be unreliable.							
Amitrole	34**	Vineyards & Orchards / Directed Spray	Registered in vineyards and orchards for control of broadleaf weeds and grasses. Apply as a directed spray to small, actively growing weeds.	56	A	ALL	R3
Carfentrazone (Hammer)	14**	Stone Fruit / Directed Spray	Registered in stone fruit for control of broadleaf weeds, including Marshmallow (<i>Malva parviflora</i>). If weeds are already present, use as a spike in a mixture with glyphosate.	NR G:14	A	ALL	R4
Carfentrazone-ethyl + Glufosinate-ammonium (Hellcat) AgNova	14**+ 10**	Stone Fruit / Directed Spray	Registered in stone fruit for control of grass and broadleaf weeds, including Marshmallow . Apply as a directed spray when weeds are young and actively growing.	21 G:56	A	ALL	R3
Dichlobenil (Casoran)	29**	Orchards, including apples, apricots, citrus, peaches, plums & vineyards / Pre-Emergent Weed Control	Registered in orchards for control of annual grass and broadleaf weeds. Spread granules evenly over bare soil to be treated.	NR	A	ALL	R4

Active Ingredient (Trade Name)	Chemical Group	Crop / Situation	Comment / Use / Weed	WHP (days)	Availability	States	Regulatory risk
Flumioxazin (Chateau)	14	Stone Fruit / Directed Spray / Residual Weed Control	Registered in stone fruit for control of grass and broadleaf weeds, including Marshmallow . Apply to bare soil using a directed spray at the base of the bushes. At least 15mm of irrigation or rainfall is required to activate the herbicide. Best application is during the period following final harvest up to bud break. Avoid direct or indirect spray contact to foliage, fruit and green bark. Do not apply to trees established in the orchard for less than 1 year.	98	A	ALL	R4
Glufosinate-P- ammonium (Basta Ultra) BASF	10**	Stone Fruit Orchards / directed or shielded spray	Registered in stone fruit orchards for control of various grass and broadleaf weeds, including Marshmallow (<i>Malva parviflora</i>). Do not allow spray to contact any part of the tree, including the trunk.	21 G:56	A	ALL	R3
Oxyfluorfen (Goal)	14**	Stone Fruit / Directed Spray	Registered in stone fruit for control of grass and broadleaf weeds, including Small Flower Mallow . If weeds are already present, use as a spike in a mixture with glyphosate.	NR NG	A	ALL	R4
Aclonifen (Emerger) Bayer	32**		Bayer is expected to seek registration for pre-emergent control of grass and broadleaf weeds in various crops. Registered in Europe for use in potatoes, legume vegetables and cereals.		P		R4
Dimethenamid-P (Outlook)	15**		Registered for pre-emergent control of grass and broadleaf weeds in sweet corn, beans, peas, pumpkins and kabocha.		P		R4
S-Metolachlor (Dual Gold) Syngenta	15**		Registered for control of grass and broadleaf weeds in Brassica vegetables, Brassica leafy vegetables, sweet potatoes, spring onions, shallots, spinach, silverbeet, rhubarb, culinary herbs and beans.		P		R4
Annual Ryegrass (<i>Lolium rigidum</i>) Priority: Moderate							
Annual Ryegrass is rated as a high priority in NSW, and as a moderate priority in VIC and SA. Annual Ryegrass is the most serious grass weed of southern Australia with distribution that is gradually extending north. Populations are prone to herbicide resistance so integrated weed management and rotation of herbicide modes of action are important aspects of a long-term control strategy.							
2,2-DPA Dalapon	0**	Peaches / Apricots	Registered in peaches and apricots for control of annual and perennial grasses. Apply as a directed spray using a handgun in established orchards.	7	A	ALL	R4

Active Ingredient (Trade Name)	Chemical Group	Crop / Situation	Comment / Use / Weed	WHP (days)	Availability	States	Regulatory risk
Amitrole	34**	Vineyards & Orchards / Directed Spray	Registered in vineyards and orchards for control of broadleaf weeds and grasses. Apply as a directed spray to small, actively growing weeds.	56	A	ALL	R3
Carfentrazone-ethyl + Glufosinate-ammonium (Hellcat) AgNova	14**+ 10**	Stone Fruit / Directed Spray	Registered in stone fruit for control of grass and broadleaf weeds, including Annual Ryegrass . Apply as a directed spray when weeds are young and actively growing.	21 G:56	A	ALL	R3
Clethodim	1***	Fruit Trees / Non-Bearing	Registered in non-bearing fruit trees for control of grass weeds, including Annual Ryegrass . Apply as a directed spray to young, actively growing weeds	NR	A	ALL	R4
Dichlobenil (Casoran)	29**	Orchards, including apples, apricots, citrus, peaches, plums & vineyards / Pre-Emergent Weed Control	Registered in orchards for control of annual grass and broadleaf weeds. Spread granules evenly over bare soil to be treated.	NR	A	ALL	R4
Fluazifop-P	1***	Stone Fruit / Spot-Spraying	Registered in stone fruit for control of grass weeds, including Annual Ryegrass . Apply to young, actively growing weeds.	NR	A	ALL	R4
Flumioxazin (Chateau)	14	Stone Fruit / Directed Spray / Residual Weed Control	Registered in stone fruit for control of grass and broadleaf weeds, including Annual Ryegrass (<i>Lolium rigidum</i>). Apply to bare soil using a directed spray at the base of the bushes. At least 15mm of irrigation or rainfall is required to activate the herbicide. Best application is during the period following final harvest up to bud break. Avoid direct or indirect spray contact to foliage, fruit and green bark. Do not apply to trees established in the orchard for less than 1 year.	98	A	ALL	R4
Glufosinate-ammonium (Basta)	10**	Stone Fruit Orchards / directed or shielded spray	Registered in stone fruit orchards for control of various grass and broadleaf weeds, including Annual Ryegrass (<i>Lolium rigidum</i>). Do not allow spray to contact any part of the tree, including the trunk.	21 G:56	A	ALL	R3

Active Ingredient (Trade Name)	Chemical Group	Crop / Situation	Comment / Use / Weed	WHP (days)	Availability	States	Regulatory risk
Glufosinate-P- ammonium (Basta Ultra) BASF	10**	Stone Fruit Orchards / directed or shielded spray	Registered in stone fruit orchards for control of various grass and broadleaf weeds, including Annual Ryegrass (<i>Lolium rigidum</i>). Do not allow spray to contact any part of the tree, including the trunk.	21 G:56	A	ALL	R3
Glyphosate	9**	Stone Fruit / directed spray, shielded spray or wick wiper	Registered in stone fruit for control of various grass and broadleaf weeds, including Ryegrass . Do not allow spray to contact any part of the tree, including the trunk.	NR	A	ALL	R3
Haloxypop (Verdict)	1***	Stone Fruit	Registered in stone fruit for control of grass weeds, including Annual Ryegrass . Apply as a directed spray.	NR	A	ALL	R4
Napropamide (Devrinol)	0**	Stone Fruit / Residual Weed Control	Registered in stone fruit for control of grass and broadleaf weeds, including Annual Ryegrass . Apply to bare soil prior to weed emergence. Maximum of 1 treatment per season.	NR NG	A	ALL	R4
Norflurazon (Zoliar)	12**	Stone Fruit (apricots, cherries, nectarines, peaches, plums) / Directed Spray / Residual Weed Control	Registered in stone fruit for control of grass and broadleaf weeds, including Annual Ryegrass . Apply as a directed spray to bare ground prior to emergence. Avoid contact with foliage or fruit. Do not apply to trees that have been established for less than 18 months.	NR	A	ALL	R4
Oxyfluorfen (Goal)	14**	Stone Fruit / Directed Spray	Registered in stone fruit for control of grass and broadleaf weeds, including Ryegrass (<i>Lolium</i> spp.). If weeds are already present, use as a spike in a mixture with glyphosate.	NR NG	A	ALL	R4
Pendimethalin (Stomp)	3**	Deciduous Fruits / Directed Spray / Residual Weed Control	Registered in deciduous fruit for control of grass and broadleaf weeds, including Annual Ryegrass . Apply to soil surface that is free of weeds, surface litter and clods, and ensure incorporation by a minimum of 5mm of rainfall or spray irrigation within 10 days.	NR	A	ALL	R4

Active Ingredient (Trade Name)	Chemical Group	Crop / Situation	Comment / Use / Weed	WHP (days)	Availability	States	Regulatory risk
Trifluralin	3**	Orchards & Vineyards	Registered in orchards and vineyards for control of grass and broadleaf weeds, including Annual Ryegrass . Apply to new planting during pre-plant cultivation, or to established crops in spring after weeds and green manure crop have been incorporated into ground.	NR	A	QLD, VIC, TAS, SA & WA	R4
Aclonifen (Emerger) Bayer	32**		Bayer is expected to seek registration for pre-emergent control of grass and broadleaf weeds in various crops. Registered in Europe for use in potatoes, legume vegetables and cereals.		P		R4
Dimethenamid-P (Outlook)	15**		Registered for pre-emergent control of grass and broadleaf weeds in sweet corn, beans, peas, pumpkins and kabocha.		P		R4
S-Metolachlor (Dual Gold) Syngenta	15**		Registered for control of grass and broadleaf weeds in Brassica vegetables, Brassica leafy vegetables, sweet potatoes, spring onions, shallots, spinach, silverbeet, rhubarb, culinary herbs and beans.		P		R4
Couch Grass (<i>Cynodon dactylon</i>) Priority: Moderate Couch Grass is rated as a high priority in VIC, and as a moderate priority in SA and NSW. Couch Grass is a widespread, perennial weed that grows year-round in most areas. Herbicide control is effective provided it is targeted to young, actively growing weeds. Multiple applications are usually required.							
2,2-DPA Dalapon	0**	Peaches / Apricots	Registered in peaches and apricots for control of annual and perennial grasses. Apply as a directed spray using a handgun in established orchards.	7	A	ALL	R4
Amitrole	34**	Vineyards & Orchards / Directed Spray	Registered in vineyards and orchards for control of broadleaf weeds and grasses. Apply as a directed spray to small, actively growing weeds.	56	A	ALL	R3
Carfentrazone-ethyl + Glufosinate-ammonium (Hellcat) AgNova	14**+ 10**	Stone Fruit / Directed Spray	Registered in stone fruit for control of grass and broadleaf weeds, including Couch Grass . Apply as a directed spray when weeds are young and actively growing.	21 G:56	A	ALL	R3

Active Ingredient (Trade Name)	Chemical Group	Crop / Situation	Comment / Use / Weed	WHP (days)	Availability	States	Regulatory risk
Dichlobenil (Casoran)	29**	Orchards, including apples, apricots, citrus, peaches, plums & vineyards / Pre-Emergent Weed Control	Registered in orchards for control of annual grass and broadleaf weeds. Spread granules evenly over bare soil to be treated.	NR	A	ALL	R4
Fluazifop-P	1***	Stone Fruit / Spot-Spraying	Registered in stone fruit for control of grass weeds, including Couch Grass . Apply to young, actively growing weeds.	NR	A	ALL	R4
Glufosinate-ammonium (Basta)	10**	Stone Fruit Orchards / directed or shielded spray	Registered in stone fruit orchards for control of various grass and broadleaf weeds, including Couch Grass (<i>Cynodon dactylon</i>). Do not allow spray to contact any part of the tree, including the trunk.	21 G:56	A	ALL	R3
Glufosinate-P-ammonium (Basta Ultra) BASF	10**	Stone Fruit Orchards / directed or shielded spray	Registered in stone fruit orchards for control of various grass and broadleaf weeds, including Couch Grass (<i>Cynodon dactylon</i>). Do not allow spray to contact any part of the tree, including the trunk.	21 G:56	A	ALL	R3
Glyphosate	9**	Stone Fruit / directed spray, shielded spray or wick wiper	Registered in stone fruit for control of various grass and broadleaf weeds, including Couch Grass . Do not allow spray to contact any part of the tree, including the trunk.	NR	A	ALL	R3
Haloxifop (Verdict)	1***	Stone Fruit	Registered in stone fruit for control of grass weeds, including Couch Grass . Apply as a directed spray.	NR	A	ALL	R4
Nonanoic Acid	-	Orchards / Directed Spray	Registered in orchards for control of broadleaf and grass weeds, including Couch Grass . Apply as a directed spray at the early vegetative stage of the weeds.	NR	A	ALL	R4
Norflurazon (Zoliar)	12**	Stone Fruit (apricots, cherries, nectarines, peaches, plums) / Directed Spray / Residual Weed Control	Registered in stone fruit for control of grass and broadleaf weeds, including Couch Grass . Apply as a directed spray to bare ground prior to emergence. Avoid contact with foliage or fruit. Do not apply to trees that have been established for less than 18 months.	NR	A	ALL	R4

Active Ingredient (Trade Name)	Chemical Group	Crop / Situation	Comment / Use / Weed	WHP (days)	Availability	States	Regulatory risk
Terbacil (Sinbar)	5**	Peaches / At Least 3 Years Old	Registered in peaches (at least 3 years old) for control of grass and broadleaf weeds, including Couch Grass . Apply as a pre-emergent to moist soil just before or during active weed growth.	NR	A	ALL (excl. WA)	R4
Aclonifen (Emerger) Bayer	32**		Bayer is expected to seek registration for pre-emergent control of grass and broadleaf weeds in various crops. Registered in Europe for use in potatoes, legume vegetables and cereals.		P		R4
Dimethenamid-P (Outlook)	15**		Registered for pre-emergent control of grass and broadleaf weeds in sweet corn, beans, peas, pumpkins and kabocha.		P		R4
S-Metolachlor (Dual Gold) Syngenta	15**		Registered for control of grass and broadleaf weeds in Brassica vegetables, Brassica leafy vegetables, sweet potatoes, spring onions, shallots, spinach, silverbeet, rhubarb, culinary herbs and beans.		P		R4
Fat Hen (<i>Chenopodium album</i>) Priority: Moderate Fat-Hen is rated as a high priority in NSW, a moderate priority in VIC, and as a low priority in SA. Fat Hen is a fast-growing, annual broadleaf weed that germinates from spring to autumn. Herbicide control can be difficult and targeting weeds at early growth stages is critical.							
Amitrole	34**	Vineyards & Orchards / Directed Spray	Registered in vineyards and orchards for control of broadleaf weeds and grasses. Apply as a directed spray to small, actively growing weeds.	56	A	ALL	R3
Carfentrazone-ethyl + Glufosinate-ammonium (Hellcat) AgNova	14**+ 10**	Stone Fruit / Directed Spray	Registered in stone fruit for control of grass and broadleaf weeds, including Fat Hen . Apply as a directed spray when weeds are young and actively growing.	21 G:56	A	ALL	R3
Dichlobenil (Casoran)	29**	Orchards, including apples, apricots, citrus, peaches, plums & vineyards / Pre-Emergent Weed Control	Registered in orchards for control of annual grass and broadleaf weeds. Spread granules evenly over bare soil to be treated.	NR	A	ALL	R4

Active Ingredient (Trade Name)	Chemical Group	Crop / Situation	Comment / Use / Weed	WHP (days)	Availability	States	Regulatory risk
Flumioxazin (Chateau)	14	Stone Fruit / Directed Spray / Residual Weed Control	Registered in stone fruit for control of grass and broadleaf weeds, including Fat Hen . Apply to bare soil using a directed spray at the base of the bushes. At least 15mm of irrigation or rainfall is required to activate the herbicide. Best application is during the period following final harvest up to bud break. Avoid direct or indirect spray contact to foliage, fruit and green bark. Do not apply to trees established in the orchard for less than 1 year.	98	A	ALL	R4
Glufosinate-ammonium (Basta)	10**	Stone Fruit Orchards / directed or shielded spray	Registered in stone fruit orchards for control of various grass and broadleaf weeds, including Fat Hen (<i>Chenopodium album</i>). Do not allow spray to contact any part of the tree, including the trunk.	21 G:56	A	ALL	R3
Glufosinate-P- ammonium (Basta Ultra) BASF	10**	Stone Fruit Orchards / directed or shielded spray	Registered in stone fruit orchards for control of various grass and broadleaf weeds, including Fat Hen (<i>Chenopodium album</i>). Do not allow spray to contact any part of the tree, including the trunk.	21 G:56	A	ALL	R3
Isoxaben (Gallery)	29**	Tree Fruits / Residual Weed Control	Registered in tree fruits for control of broadleaf weeds, including Fat Hen . Apply to bare soil prior to weed emergence. Rainfall or irrigation is required within 21 days to activate the herbicide. Maximum of 2 applications per year.	NR	A	ALL	R4
Nonanoic Acid	-	Orchards / Directed Spray	Registered in orchards for control of broadleaf and grass weeds, including Fat Hen . Apply as a directed spray at the early vegetative stage of the weeds.	NR	A	ALL	R4
Norflurazon (Zoliar)	12**	Stone Fruit (apricots, cherries, nectarines, peaches, plums) / Directed Spray / Residual Weed Control	Registered in stone fruit for control of grass and broadleaf weeds, including Fat Hen . Apply as a directed spray to bare ground prior to emergence. Avoid contact with foliage or fruit. Do not apply to trees that have been established for less than 18 months.	NR	A	ALL	R4

Active Ingredient (Trade Name)	Chemical Group	Crop / Situation	Comment / Use / Weed	WHP (days)	Availability	States	Regulatory risk
Oryzalin	3**	Stone Fruit (apricot, cherry, nectarine, peach, plum & prune) / Directed Spray	Registered in stone fruit for control of grass & broadleaf weeds, including Fat Hen . Apply to bare soil using a directed spray at the base of the trees. Requires at least 15mm of irrigation or rain to activate.	NR	A	ALL	R4
Oxyfluorfen (Goal)	14**	Stone Fruit / Directed Spray	Registered in stone fruit for control of grass and broadleaf weeds, including Fat Hen . If weeds are already present, use as a spike in a mixture with glyphosate.	NR NG	A	ALL	R4
Pendimethalin (Stomp)	3**	Deciduous Fruits / Directed Spray / Residual Weed Control	Registered in deciduous fruit for control of grass and broadleaf weeds, including Fat Hen . Apply to soil surface that is free of weeds, surface litter and clods, and ensure incorporation by a minimum of 5mm of rainfall or spray irrigation within 10 days.	NR	A	ALL	R4
Terbacil (Sinbar)	5**	Peaches / At Least 3 Years Old	Registered in peaches (at least 3 years old) for control of grass and broadleaf weeds, including Fat Hen . Apply as a pre-emergent to moist soil just before or during active weed growth.	NR	A	ALL (excl. WA)	R4
Aclonifen (Emerger) Bayer	32**		Bayer is expected to seek registration for pre-emergent control of grass and broadleaf weeds in various crops. Registered in Europe for use in potatoes, legume vegetables and cereals.		P		R4
Dimethenamid-P (Outlook)	15**		Registered for pre-emergent control of grass and broadleaf weeds in sweet corn, beans, peas, pumpkins and kabocha.		P		R4
S-Metolachlor (Dual Gold) Syngenta	15**		Registered for control of grass and broadleaf weeds in Brassica vegetables, Brassica leafy vegetables, sweet potatoes, spring onions, shallots, spinach, silverbeet, rhubarb, culinary herbs and beans.		P		R4
Capeweed (<i>Arctotheca calendula</i>) Priority: Moderate							
Capeweed is rated as a moderate priority in VIC and NSW, and as a low priority in SA. Capeweed is an annual broadleaf weed that germinates in the cooler months and is widespread in temperate regions. It seeds and grows prolifically and is difficult to control with knockdown herbicides.							
Amitrole	34**	Vineyards & Orchards / Directed Spray	Registered in vineyards and orchards for control of broadleaf weeds and grasses. Apply as a directed spray to small, actively growing weeds.	56	A	ALL	R3

Active Ingredient (Trade Name)	Chemical Group	Crop / Situation	Comment / Use / Weed	WHP (days)	Availability	States	Regulatory risk
Carfentrazone (Hammer)	14**	Stone Fruit / Directed Spray	Registered in stone fruit for control of broadleaf weeds, including Capeweed (<i>Arctotheca calendula</i>). If weeds are already present, use as a spike in a mixture with glyphosate.	NR G:14	A	ALL	R4
Carfentrazone-ethyl + Glufosinate-ammonium (Hellcat) AgNova	14**+ 10**	Stone Fruit / Directed Spray	Registered in stone fruit for control of grass and broadleaf weeds, including Capeweed . Apply as a directed spray when weeds are young and actively growing.	21 G:56	A	ALL	R3
Dichlobenil (Casoran)	29**	Orchards, including apples, apricots, citrus, peaches, plums & vineyards / Pre-Emergent Weed Control	Registered in orchards for control of annual grass and broadleaf weeds. Spread granules evenly over bare soil to be treated.	NR	A	ALL	R4
Flumioxazin (Chateau)	14	Stone Fruit / Directed Spray / Residual Weed Control	Registered in stone fruit for control of grass and broadleaf weeds, including Capeweed . Apply to bare soil using a directed spray at the base of the bushes. At least 15mm of irrigation or rainfall is required to activate the herbicide. Best application is during the period following final harvest up to bud break. Avoid direct or indirect spray contact to foliage, fruit and green bark. Do not apply to trees established in the orchard for less than 1 year.	98	A	ALL	R4
Glufosinate-ammonium (Basta)	10**	Stone Fruit Orchards / directed or shielded spray	Registered in stone fruit orchards for control of various grass and broadleaf weeds, including Capeweed (<i>Arctotheca calendula</i>). Do not allow spray to contact any part of the tree, including the trunk.	21 G:56	A	ALL	R3
Glufosinate-P- ammonium (Basta Ultra) BASF	10**	Stone Fruit Orchards / directed or shielded spray	Registered in stone fruit orchards for control of various grass and broadleaf weeds, including Capeweed (<i>Arctotheca calendula</i>). Do not allow spray to contact any part of the tree, including the trunk.	21 G:56	A	ALL	R3
Glyphosate	9**	Stone Fruit / directed spray, shielded spray or wick wiper	Registered in stone fruit for control of various grass and broadleaf weeds, including Capeweed . Do not allow spray to contact any part of the tree, including the trunk.	NR	A	ALL	R3

Active Ingredient (Trade Name)	Chemical Group	Crop / Situation	Comment / Use / Weed	WHP (days)	Availability	States	Regulatory risk
Isoxaben (Gallery)	29**	Tree Fruits / Residual Weed Control	Registered in tree fruits for control of broadleaf weeds, including Capeweed . Apply to bare soil prior to weed emergence. Rainfall or irrigation is required within 21 days to activate the herbicide. Maximum of 2 applications per year.	NR	A	ALL	R4
Nonanoic Acid	-	Orchards / Directed Spray	Registered in orchards for control of broadleaf and grass weeds, including Capeweed . Apply as a directed spray at the early vegetative stage of the weeds.	NR	A	ALL	R4
Norflurazon (Zoliar)	12**	Stone Fruit (apricots, cherries, nectarines, peaches, plums) / Directed Spray / Residual Weed Control	Registered in stone fruit for control of grass and broadleaf weeds, including Capeweed . Apply as a directed spray to bare ground prior to emergence. Avoid contact with foliage or fruit. Do not apply to trees that have been established for less than 18 months.	NR	A	ALL	R4
Oxyfluorfen (Goal)	14**	Stone Fruit / Directed Spray	Registered in stone fruit for control of grass and broadleaf weeds, including Capeweed . If weeds are already present, use as a spike in a mixture with glyphosate.	NR NG	A	ALL	R4
Terbacil (Sinbar)	5**	Peaches / At Least 3 Years Old	Registered in peaches (at least 3 years old) for control of grass and broadleaf weeds, including Capeweed . Apply as a pre-emergent to moist soil just before or during active weed growth.	NR	A	ALL (excl. WA)	R4
Aclonifen (Emerger) Bayer	32**		Bayer is expected to seek registration for pre-emergent control of grass and broadleaf weeds in various crops. Registered in Europe for use in potatoes, legume vegetables and cereals.		P		R4
Dimethenamid-P (Outlook)	15**		Registered for pre-emergent control of grass and broadleaf weeds in sweet corn, beans, peas, pumpkins and kabocha.		P		R4
S-Metolachlor (Dual Gold) Syngenta	15**		Registered for control of grass and broadleaf weeds in Brassica vegetables, Brassica leafy vegetables, sweet potatoes, spring onions, shallots, spinach, silverbeet, rhubarb, culinary herbs and beans.		P		R4

Active Ingredient (Trade Name)	Chemical Group	Crop / Situation	Comment / Use / Weed	WHP (days)	Availability	States	Regulatory risk
Barnyard Grass (<i>Echinochloa colona</i>) Liverseed Grass (<i>Urochloa panicoides</i>) Barley Grass (<i>Hordeum</i> spp.) Priority: Moderate							
Barnyard Grass and Barley Grass are rated as a moderate priority in VIC and NSW, and as a low priority in SA, and Liverseed Grass is rated as a moderate priority in NSW, and as a low priority in VIC and SA. Barnyard Grass is a summer annual grass weed that is a prolific seeder, is highly competitive and is difficult to control with herbicides. It is prone to development of herbicide resistance, with confirmed cases of resistance to Group 9 and Group 5 herbicides. Liverseed Grass is a common, summer-growing annual grass weed. It competes aggressively and is difficult to remove from inter-row grass swards. Barley Grass is an annual species that is renowned for rapidly germinating after rain. Herbicide control needs to be targeted at young, actively growing weeds.							
2,2-DPA Dalapon	0**	Peaches / Apricots	Registered in peaches and apricots for control of annual and perennial grasses. Apply as a directed spray using a handgun in established orchards.	7	A	ALL	R4
Amitrole	34**	Vineyards & Orchards / Directed Spray	Registered in vineyards and orchards for control of broadleaf weeds and grasses. Apply as a directed spray to small, actively growing weeds.	56	A	ALL	R3
Carfentrazone-ethyl + Glufosinate-ammonium (Hellcat) AgNova	14**+ 10**	Stone Fruit / Directed Spray	Registered in stone fruit for control of grass and broadleaf weeds, including Barnyard Grass , Liverseed Grass and Barley Grass . Apply as a directed spray when weeds are young and actively growing.	21 G:56	A	ALL	R3
Clethodim	1***	Fruit Trees / Non-Bearing	Registered in non-bearing fruit trees for control of grass weeds, including Barnyard Grass and Liverseed Grass and Barley Grass. Apply as a directed spray to young, actively growing weeds	NR	A	ALL	R4
Dichlobenil (Casoran)	29**	Orchards, including apples, apricots, citrus, peaches, plums & vineyards / Pre-Emergent Weed Control	Registered in orchards for control of annual grass and broadleaf weeds. Spread granules evenly over bare soil to be treated.	NR	A	ALL	R4
Fluazifop-P	1***	Stone Fruit / Spot-Spraying	Registered in stone fruit for control of grass weeds, including Barnyard Grass , Liverseed Grass and Barley Grass . Apply to young, actively growing weeds.	NR	A	ALL	R4

Active Ingredient (Trade Name)	Chemical Group	Crop / Situation	Comment / Use / Weed	WHP (days)	Availability	States	Regulatory risk
Flumioxazin (Chateau)	14	Stone Fruit / Directed Spray / Residual Weed Control	Registered in stone fruit for control of grass and broadleaf weeds, including Barnyard Grass (<i>Echinochloa colona</i>). Apply to bare soil using a directed spray at the base of the bushes. At least 15mm of irrigation or rainfall is required to activate the herbicide. Best application is during the period following final harvest up to bud break. Avoid direct or indirect spray contact to foliage, fruit and green bark. Do not apply to trees established in the orchard for less than 1 year.	98	A	ALL	R4
Glufosinate-ammonium (Basta)	10**	Stone Fruit Orchards / directed or shielded spray	Registered in stone fruit orchards for control of various grass and broadleaf weeds, including Barnyard Grass . Do not allow spray to contact any part of the tree, including the trunk.	21 G:56	A	ALL	R3
Glufosinate-P- ammonium (Basta Ultra) BASF	10**	Stone Fruit Orchards / directed or shielded spray	Registered in stone fruit orchards for control of various grass and broadleaf weeds, including Barnyard Grass . Do not allow spray to contact any part of the tree, including the trunk.	21 G:56	A	ALL	R3
Glyphosate	9**	Stone Fruit / directed spray, shielded spray or wick wiper	Registered in stone fruit for control of various grass and broadleaf weeds, including Barley Grass , Liverseed Grass and Barnyard Grass . Do not allow spray to contact any part of the tree, including the trunk.	NR	A	ALL	R3
Haloxypop (Verdict)	1***	Stone Fruit	Registered in stone fruit for control of grass weeds, including Barnyard Grass , Liverseed Grass and Barley Grass . Apply as a directed spray.	NR	A	ALL	R4
Napropamide (Devrinol)	0**	Stone Fruit / Residual Weed Control	Registered in stone fruit for control of grass and broadleaf weeds, including Barnyard Grass and Liverseed Grass . Apply to bare soil prior to weed emergence. Maximum of 1 treatment per season.	NR NG	A	ALL	R4
Nonanoic Acid	-	Orchards / Directed Spray	Registered in orchards for control of broadleaf and grass weeds, including Barnyard Grass . Apply as a directed spray at the early vegetative stage of the weeds.	NR	A	ALL	R4

Active Ingredient (Trade Name)	Chemical Group	Crop / Situation	Comment / Use / Weed	WHP (days)	Availability	States	Regulatory risk
Norflurazon (Zoliar)	12**	Stone Fruit (apricots, cherries, nectarines, peaches, plums) / Directed Spray / Residual Weed Control	Registered in stone fruit for control of grass and broadleaf weeds, including Barley Grass . Apply as a directed spray to bare ground prior to emergence. Avoid contact with foliage or fruit. Do not apply to trees that have been established for less than 18 months.	NR	A	ALL	R4
Oryzalin	3**	Stone Fruit (apricot, cherry, nectarine, peach, plum & prune) / Directed Spray	Registered in stone fruit for control of grass & broadleaf weeds, including Barnyard Grass . Apply to bare soil using a directed spray at the base of the trees. Requires at least 15mm of irrigation or rain to activate.	NR	A	ALL	R4
Oxyfluorfen (Goal)	14**	Stone Fruit / Directed Spray	Registered in stone fruit for control of grass and broadleaf weeds, including Barnyard Grass (<i>Echinochloa</i> spp.), Liverseed Grass (<i>Urochloa panicoides</i>) and Barley Grass (<i>Hordeum leporinum</i>). If weeds are already present, use as a spike in a mixture with glyphosate.	NR NG	A	ALL	R4
Pendimethalin (Stomp)	3**	Deciduous Fruits / Directed Spray / Residual Weed Control	Registered in deciduous fruit for control of grass and broadleaf weeds, including Barnyard Grass . Apply to soil surface that is free of weeds, surface litter and clods, and ensure incorporation by a minimum of 5mm of rainfall or spray irrigation within 10 days.	NR	A	ALL	R4
Terbacil (Sinbar)	5**	Peaches / At Least 3 Years Old	Registered in peaches (at least 3 years old) for control of grass and broadleaf weeds, including Barnyard Grass and Barley Grass . Apply as a pre-emergent to moist soil just before or during active weed growth.	NR	A	ALL (excl. WA)	R4
Trifluralin	3**	Orchards & Vineyards	Registered in orchards and vineyards for control of grass and broadleaf weeds, including Barnyard Grass and Liverseed Grass . Apple to new planting during pre-plant cultivation, or to established crops in spring after weeds and green manure crop have been incorporated into ground.	NR	A	QLD, VIC, TAS, SA & WA	R4
Aclonifen (Emerger) Bayer	32**		Bayer is expected to seek registration for pre-emergent control of grass and broadleaf weeds in various crops. Registered in Europe for use in potatoes, legume vegetables and cereals.		P		R4

Active Ingredient (Trade Name)	Chemical Group	Crop / Situation	Comment / Use / Weed	WHP (days)	Availability	States	Regulatory risk
Dimethenamid-P (Outlook)	15**		Registered for pre-emergent control of grass and broadleaf weeds in sweet corn, beans, peas, pumpkins and kabocha.		P		R4
S-Metolachlor (Dual Gold) Syngenta	15**		Registered for control of grass and broadleaf weeds in Brassica vegetables, Brassica leafy vegetables, sweet potatoes, spring onions, shallots, spinach, silverbeet, rhubarb, culinary herbs and beans.		P		R4
Paspalum (<i>Paspalum dilatatum</i>) Priority: Moderate Paspalum is rated as a moderate priority in NSW, and as a low priority in VIC and SA. Paspalum is a perennial grass weeds that forms clumps that are tough to control. They are aggressive and fast-growing and ongoing control measures are required to keep them in check. Spot spraying can be effective, but it is important to target newly germinated weeds to achieve effective control.							
2,2-DPA Dalapon	0**	Peaches / Apricots	Registered in peaches and apricots for control of annual and perennial grasses. Apply as a directed spray using a handgun in established orchards.	7	A	ALL	R4
Amitrole	34**	Vineyards & Orchards / Directed Spray	Registered in vineyards and orchards for control of broadleaf weeds and grasses. Apply as a directed spray to small, actively growing weeds.	56	A	ALL	R3
Carfentrazone-ethyl + Glufosinate-ammonium (Hellcat) AgNova	14**+ 10**	Stone Fruit / Directed Spray	Registered in stone fruit for control of grass and broadleaf weeds, including Paspalum . Apply as a directed spray when weeds are young and actively growing.	21 G:56	A	ALL	R3
Fluazifop-P	1***	Stone Fruit / Spot- Spraying	Registered in stone fruit for control of grass weeds, including Paspalum . Apply to young, actively growing weeds.	NR	A	ALL	R4
Glufosinate-ammonium (Basta)	10**	Stone Fruit Orchards / directed or shielded spray	Registered in stone fruit orchards for control of various grass and broadleaf weeds, including Paspalum . Do not allow spray to contact any part of the tree, including the trunk.	21 G:56	A	ALL	R3
Glufosinate-P- ammonium (Basta Ultra) BASF	10**	Stone Fruit Orchards / directed or shielded spray	Registered in stone fruit orchards for control of various grass and broadleaf weeds, including Paspalum . Do not allow spray to contact any part of the tree, including the trunk.	21 G:56	A	ALL	R3

Active Ingredient (Trade Name)	Chemical Group	Crop / Situation	Comment / Use / Weed	WHP (days)	Availability	States	Regulatory risk
Glyphosate	9**	Stone Fruit / directed spray, shielded spray or wick wiper	Registered in stone fruit for control of various grass and broadleaf weeds, including Paspalum . Do not allow spray to contact any part of the tree, including the trunk.	NR	A	ALL	R3
Haloxypop (Verdict)	1***	Stone Fruit	Registered in stone fruit for control of grass weeds, including Paspalum spp. Apply as a directed spray.	NR	A	ALL	R4
Norflurazon (Zoliar)	12**	Stone Fruit (apricots, cherries, nectarines, peaches, plums) / Directed Spray / Residual Weed Control	Registered in stone fruit for control of grass and broadleaf weeds, including Paspalum . Apply as a directed spray to bare ground prior to emergence. Avoid contact with foliage or fruit. Do not apply to trees that have been established for less than 18 months.	NR	A	ALL	R4
Aclonifen (Emerger) Bayer	32**		Bayer is expected to seek registration for pre-emergent control of grass and broadleaf weeds in various crops. Registered in Europe for use in potatoes, legume vegetables and cereals.		P		R4
Dimethenamid-P (Outlook)	15**		Registered for pre-emergent control of grass and broadleaf weeds in sweet corn, beans, peas, pumpkins and kabocha.		P		R4
S-Metolachlor (Dual Gold) Syngenta	15**		Registered for control of grass and broadleaf weeds in Brassica vegetables, Brassica leafy vegetables, sweet potatoes, spring onions, shallots, spinach, silverbeet, rhubarb, culinary herbs and beans.		P		R4
Johnson Grass (<i>Sorghum halepense</i>) Priority: Moderate							
Johnson Grass is rated as a moderate priority in NSW, and as a low priority in VIC and SA. Johnson Grass is a large, summer growing perennial that is difficult to eradicate with herbicides.							
2,2-DPA Dalapon	0**	Peaches / Apricots	Registered in peaches and apricots for control of annual and perennial grasses. Apply as a directed spray using a handgun in established orchards.	7	A	ALL	R4
Amitrole	34**	Vineyards & Orchards / Directed Spray	Registered in vineyards and orchards for control of broadleaf weeds and grasses. Apply as a directed spray to small, actively growing weeds.	56	A	ALL	R3

Active Ingredient (Trade Name)	Chemical Group	Crop / Situation	Comment / Use / Weed	WHP (days)	Availability	States	Regulatory risk
Carfentrazone-ethyl + Glufosinate-ammonium (Hellcat) AgNova	14**+ 10**	Stone Fruit / Directed Spray	Registered in stone fruit for control of grass and broadleaf weeds, including Johnson Grass . Apply as a directed spray when weeds are young and actively growing.	21 G:56	A	ALL	R3
Clethodim	1***	Fruit Trees / Non- Bearing	Registered in non-bearing fruit trees for control of grass weeds, including Johnson Grass seedlings. Apply as a directed spray to young, actively growing weeds	NR	A	ALL	R4
Dichlobenil (Casoran)	29**	Orchards, including apples, apricots, citrus, peaches, plums & vineyards / Pre-Emergent Weed Control	Registered in orchards for control of annual grass and broadleaf weeds. Spread granules evenly over bare soil to be treated.	NR	A	ALL	R4
Fluazifop-P	1***	Stone Fruit / Spot- Spraying	Registered in stone fruit for control of grass weeds, including Johnson Grass . Apply to young, actively growing weeds.	NR	A	ALL	R4
Glufosinate-ammonium (Basta)	10**	Stone Fruit Orchards / directed or shielded spray	Registered in stone fruit orchards for control of various grass and broadleaf weeds, including Johnson Grass (<i>Sorghum halepense</i>). Do not allow spray to contact any part of the tree, including the trunk.	21 G:56	A	ALL	R3
Glufosinate-P- ammonium (Basta Ultra) BASF	10**	Stone Fruit Orchards / directed or shielded spray	Registered in stone fruit orchards for control of various grass and broadleaf weeds, including Johnson Grass (<i>Sorghum halepense</i>). Do not allow spray to contact any part of the tree, including the trunk.	21 G:56	A	ALL	R3
Glyphosate	9**	Stone Fruit / directed spray, shielded spray or wick wiper	Registered in stone fruit for control of various grass and broadleaf weeds, including Johnson Grass . Do not allow spray to contact any part of the tree, including the trunk.	NR	A	ALL	R3
Haloxypop (Verdict)	1***	Stone Fruit	Registered in stone fruit for control of grass weeds, including Johnson Grass . Apply as a directed spray.	NR	A	ALL	R4

Active Ingredient (Trade Name)	Chemical Group	Crop / Situation	Comment / Use / Weed	WHP (days)	Availability	States	Regulatory risk
Norflurazon (Zoliar)	12**	Stone Fruit (apricots, cherries, nectarines, peaches, plums) / Directed Spray / Residual Weed Control	Registered in stone fruit for control of grass and broadleaf weeds, including Johnson Grass . Apply as a directed spray to bare ground prior to emergence. Avoid contact with foliage or fruit. Do not apply to trees that have been established for less than 18 months.	NR	A	ALL	R4
Terbacil (Sinbar)	5**	Peaches / At Least 3 Years Old	Registered in peaches (at least 3 years old) for control of grass and broadleaf weeds, including Johnson Grass . Apply as a pre-emergent to moist soil just before or during active weed growth.	NR	A	ALL (excl. WA)	R4
Trifluralin	3**	Orchards & Vineyards	Registered in orchards and vineyards for control of grass and broadleaf weeds, including Johnson Grass . Apply to new planting during pre-plant cultivation, or to established crops in spring after weeds and green manure crop have been incorporated into ground.	NR	A	QLD, VIC, TAS, SA & WA	R4
Aclonifen (Emerger) Bayer	32**		Bayer is expected to seek registration for pre-emergent control of grass and broadleaf weeds in various crops. Registered in Europe for use in potatoes, legume vegetables and cereals.		P		R4
Dimethenamid-P (Outlook)	15**		Registered for pre-emergent control of grass and broadleaf weeds in sweet corn, beans, peas, pumpkins and kabocha.		P		R4
S-Metolachlor (Dual Gold) Syngenta	15**		Registered for control of grass and broadleaf weeds in Brassica vegetables, Brassica leafy vegetables, sweet potatoes, spring onions, shallots, spinach, silverbeet, rhubarb, culinary herbs and beans.		P		R4
Sowthistle (<i>Sonchus oleraceus</i>) Priority: Moderate							
Sowthistle is rated as a moderate priority in VIC, SA and NSW. Sowthistle is prolific and widespread in all regions, and it is also prone to development of herbicide resistance. Timely herbicide control can be effective provided that weeds are targeted when they are young and actively growing.							
Amitrole	34**	Vineyards & Orchards / Directed Spray	Registered in vineyards and orchards for control of broadleaf weeds and grasses. Apply as a directed spray to small, actively growing weeds.	56	A	ALL	R3

Active Ingredient (Trade Name)	Chemical Group	Crop / Situation	Comment / Use / Weed	WHP (days)	Availability	States	Regulatory risk
Carfentrazone-ethyl + Glufosinate-ammonium (Hellcat) AgNova	14**+ 10**	Stone Fruit / Directed Spray	Registered in stone fruit for control of grass and broadleaf weeds, including Milk Thistle (Sowthistle) . Apply as a directed spray when weeds are young and actively growing.	21 G:56	A	ALL	R3
Dichlobenil (Casoran)	29**	Orchards, including apples, apricots, citrus, peaches, plums & vineyards / Pre-Emergent Weed Control	Registered in orchards for control of annual grass and broadleaf weeds. Spread granules evenly over bare soil to be treated.	NR	A	ALL	R4
Flumioxazin (Chateau)	14	Stone Fruit / Directed Spray / Residual Weed Control	Registered in stone fruit for control of grass and broadleaf weeds, including Milk Thistle (<i>Sonchus oleraceus</i>). Apply to bare soil using a directed spray at the base of the bushes. At least 15mm of irrigation or rainfall is required to activate the herbicide. Best application is during the period following final harvest up to bud break. Avoid direct or indirect spray contact to foliage, fruit and green bark. Do not apply to trees established in the orchard for less than 1 year.	98	A	ALL	R4
Glufosinate-ammonium (Basta)	10**	Stone Fruit Orchards / directed or shielded spray	Registered in stone fruit orchards for control of various grass and broadleaf weeds, including Milk Thistle (<i>Sonchus oleraceus</i>). Do not allow spray to contact any part of the tree, including the trunk.	21 G:56	A	ALL	R3
Glufosinate-P- ammonium (Basta Ultra) BASF	10**	Stone Fruit Orchards / directed or shielded spray	Registered in stone fruit orchards for control of various grass and broadleaf weeds, including Milk Thistle (<i>Sonchus oleraceus</i>). Do not allow spray to contact any part of the tree, including the trunk.	21 G:56	A	ALL	R3
Glyphosate	9**	Stone Fruit / directed spray, shielded spray or wick wiper	Registered in stone fruit for control of various grass and broadleaf weeds, including Sowthistle . Do not allow spray to contact any part of the tree, including the trunk.	NR	A	ALL	R3

Active Ingredient (Trade Name)	Chemical Group	Crop / Situation	Comment / Use / Weed	WHP (days)	Availability	States	Regulatory risk
Isoxaben (Gallery)	29**	Tree Fruits / Residual Weed Control	Registered in tree fruits for control of broadleaf weeds, including Milk Thistle . Apply to bare soil prior to weed emergence. Rainfall or irrigation is required within 21 days to activate the herbicide. Maximum of 2 applications per year.	NR	A	ALL	R4
Napropamide (Devrinol)	0**	Stone Fruit / Residual Weed Control	Registered in stone fruit for control of grass and broadleaf weeds, including Sowthistle . Apply to bare soil prior to weed emergence. Maximum of 1 treatment per season.	NR NG	A	ALL	R4
Nonanoic Acid	-	Orchards / Directed Spray	Registered in orchards for control of broadleaf and grass weeds, including Sowthistle . Apply as a directed spray at the early vegetative stage of the weeds.	NR	A	ALL	R4
Norflurazon (Zoliar)	12**	Stone Fruit (apricots, cherries, nectarines, peaches, plums) / Directed Spray / Residual Weed Control	Registered in stone fruit for control of grass and broadleaf weeds, including Common Sowthistle . Apply as a directed spray to bare ground prior to emergence. Avoid contact with foliage or fruit. Do not apply to trees that have been established for less than 18 months.	NR	A	ALL	R4
Oryzalin	3**	Stone Fruit (apricot, cherry, nectarine, peach, plum & prune) / Directed Spray	Registered in stone fruit for control of grass & broadleaf weeds, including Sowthistle . Apply to bare soil using a directed spray at the base of the trees. Requires at least 15mm of irrigation or rain to activate.	NR	A	ALL	R4
Oxyfluorfen (Goal)	14**	Stone Fruit / Directed Spray	Registered in stone fruit for control of grass and broadleaf weeds, including Sowthistle . If weeds are already present, use as a spike in a mixture with glyphosate.	NR NG	A	ALL	R4
Pendimethalin (Stomp)	3**	Deciduous Fruits / Directed Spray / Residual Weed Control	Registered in deciduous fruit for control of grass and broadleaf weeds, including Sowthistle . Apply to soil surface that is free of weeds, surface litter and clods, and ensure incorporation by a minimum of 5mm of rainfall or spray irrigation within 10 days.	NR	A	ALL	R4

Active Ingredient (Trade Name)	Chemical Group	Crop / Situation	Comment / Use / Weed	WHP (days)	Availability	States	Regulatory risk
Terbacil (Sinbar)	5**	Peaches / At Least 3 Years Old	Registered in peaches (at least 3 years old) for control of grass and broadleaf weeds, including Milk Thistle . Apply as a pre-emergent to moist soil just before or during active weed growth.	NR	A	ALL (excl. WA)	R4
Aclonifen (Emerger) Bayer	32**		Bayer is expected to seek registration for pre-emergent control of grass and broadleaf weeds in various crops. Registered in Europe for use in potatoes, legume vegetables and cereals.		P		R4
Dimethenamid-P (Outlook)	15**		Registered for pre-emergent control of grass and broadleaf weeds in sweet corn, beans, peas, pumpkins and kabocha.		P		R4
S-Metolachlor (Dual Gold) Syngenta	15**		Registered for control of grass and broadleaf weeds in Brassica vegetables, Brassica leafy vegetables, sweet potatoes, spring onions, shallots, spinach, silverbeet, rhubarb, culinary herbs and beans.		P		R4
Pigweed (<i>Portulaca</i> spp.) Priority: Moderate Pigweed is rated as a moderate priority in VIC and NSW, and as a low priority in SA. Pigweed is a summer growing broadleaf weed that competes aggressively and can be difficult to control with herbicides.							
Amitrole	34**	Vineyards & Orchards / Directed Spray	Registered in vineyards and orchards for control of broadleaf weeds and grasses. Apply as a directed spray to small, actively growing weeds.	56	A	ALL	R3
Carfentrazone-ethyl + Glufosinate-ammonium (Hellcat) AgNova	14**+ 10**	Stone Fruit / Directed Spray	Registered in stone fruit for control of grass and broadleaf weeds, including Pigweed . Apply as a directed spray when weeds are young and actively growing.	21 G:56	A	ALL	R3
Dichlobenil (Casoran)	29**	Orchards, including apples, apricots, citrus, peaches, plums & vineyards / Pre-Emergent Weed Control	Registered in orchards for control of annual grass and broadleaf weeds. Spread granules evenly over bare soil to be treated.	NR	A	ALL	R4
Glufosinate-ammonium (Basta)	10**	Stone Fruit Orchards / directed or shielded spray	Registered in stone fruit orchards for control of various grass and broadleaf weeds, including Pigweed (<i>Portulaca oleraceus</i>). Do not allow spray to contact any part of the tree, including the trunk.	21 G:56	A	ALL	R3

Active Ingredient (Trade Name)	Chemical Group	Crop / Situation	Comment / Use / Weed	WHP (days)	Availability	States	Regulatory risk
Glufosinate-P- ammonium (Basta Ultra) BASF	10**	Stone Fruit Orchards / directed or shielded spray	Registered in stone fruit orchards for control of various grass and broadleaf weeds, including Pigweed (<i>Portulaca oleraceus</i>). Do not allow spray to contact any part of the tree, including the trunk.	21 G:56	A	ALL	R3
Glyphosate	9**	Stone Fruit / directed spray, shielded spray or wick wiper	Registered in stone fruit for control of various grass and broadleaf weeds, including Pigweed . Do not allow spray to contact any part of the tree, including the trunk.	NR	A	ALL	R3
Isoxaben (Gallery)	29**	Tree Fruits / Residual Weed Control	Registered in tree fruits for control of broadleaf weeds, including Pigweed . Apply to bare soil prior to weed emergence. Rainfall or irrigation is required within 21 days to activate the herbicide. Maximum of 2 applications per year.	NR	A	ALL	R4
Napropamide (Devrinol)	0**	Stone Fruit / Residual Weed Control	Registered in stone fruit for control of grass and broadleaf weeds, including Pigweed . Apply to bare soil prior to weed emergence. Maximum of 1 treatment per season.	NR NG	A	ALL	R4
Norflurazon (Zoliar)	12**	Stone Fruit (apricots, cherries, nectarines, peaches, plums) / Directed Spray / Residual Weed Control	Registered in stone fruit for control of grass and broadleaf weeds, including Pigweed . Apply as a directed spray to bare ground prior to emergence. Avoid contact with foliage or fruit. Do not apply to trees that have been established for less than 18 months.	NR	A	ALL	R4
Oryzalin	3**	Stone Fruit (apricot, cherry, nectarine, peach, plum & prune) / Directed Spray	Registered in stone fruit for control of grass & broadleaf weeds, including Pigweed . Apply to bare soil using a directed spray at the base of the trees. Requires at least 15mm of irrigation or rain to activate.	NR	A	ALL	R4
Oxyfluorfen (Goal)	14**	Stone Fruit / Directed Spray	Registered in stone fruit for control of grass and broadleaf weeds, including Pigweed . If weeds are already present, use as a spike in a mixture with glyphosate.	NR NG	A	ALL	R4

Active Ingredient (Trade Name)	Chemical Group	Crop / Situation	Comment / Use / Weed	WHP (days)	Availability	States	Regulatory risk
Pendimethalin (Stomp)	3**	Deciduous Fruits / Directed Spray / Residual Weed Control	Registered in deciduous fruit for control of grass and broadleaf weeds, including Pigweed . Apply to soil surface that is free of weeds, surface litter and clods, and ensure incorporation by a minimum of 5mm of rainfall or spray irrigation within 10 days.	NR	A	ALL	R4
Terbacil (Sinbar)	5**	Peaches / At Least 3 Years Old	Registered in peaches (at least 3 years old) for control of grass and broadleaf weeds, including Pigweed . Apply as a pre-emergent to moist soil just before or during active weed growth.	NR	A	ALL (excl. WA)	R4
Trifluralin	3**	Orchards & Vineyards	Registered in orchards and vineyards for control of grass and broadleaf weeds, including Pigweed . Apply to new planting during pre-plant cultivation, or to established crops in spring after weeds and green manure crop have been incorporated into ground.	NR	A	QLD, VIC, TAS, SA & WA	R4
Aclonifen (Emerger) Bayer	32**		Bayer is expected to seek registration for pre-emergent control of grass and broadleaf weeds in various crops. Registered in Europe for use in potatoes, legume vegetables and cereals.		P		R4
Dimethenamid-P (Outlook)	15**		Registered for pre-emergent control of grass and broadleaf weeds in sweet corn, beans, peas, pumpkins and kabocha.		P		R4
S-Metolachlor (Dual Gold) Syngenta	15**		Registered for control of grass and broadleaf weeds in Brassica vegetables, Brassica leafy vegetables, sweet potatoes, spring onions, shallots, spinach, silverbeet, rhubarb, culinary herbs and beans.		P		R4
Blackberry Nightshade (<i>Solanum nigrum</i>) Silverleaf Nightshade (<i>Solanum elaeagnifolium</i>) Priority: Moderate Blackberry Nightshade and Silverleaf Nightshade are rated as a moderate priority in VIC and NSW, and as a low priority in SA. Nightshades are competitive weeds that are widespread in all regions. Herbicide control is effective but requires timely application and avoidance of seed set over several years to bring the soil seed bank down.							
Amitrole	34**	Vineyards & Orchards / Directed Spray	Registered in vineyards and orchards for control of broadleaf weeds and grasses. Apply as a directed spray to small, actively growing weeds.	56	A	ALL	R3

Active Ingredient (Trade Name)	Chemical Group	Crop / Situation	Comment / Use / Weed	WHP (days)	Availability	States	Regulatory risk
Dichlobenil (Casoran)	29**	Orchards, including apples, apricots, citrus, peaches, plums & vineyards / Pre-Emergent Weed Control	Registered in orchards for control of annual grass and broadleaf weeds. Spread granules evenly over bare soil to be treated.	NR	A	ALL	R4
Flumioxazin (Chateau)	14	Stone Fruit / Directed Spray / Residual Weed Control	Registered in stone fruit for control of grass and broadleaf weeds, including Blackberry Nightshade (<i>Solanum nigrum</i>). Apply to bare soil using a directed spray at the base of the bushes. At least 15mm of irrigation or rainfall is required to activate the herbicide. Best application is during the period following final harvest up to bud break. Avoid direct or indirect spray contact to foliage, fruit and green bark. Do not apply to trees established in the orchard for less than 1 year.	98	A	ALL	R4
Isoxaben (Gallery)	29**	Tree Fruits / Residual Weed Control	Registered in tree fruits for control of broadleaf weeds, including Blackberry Nightshade . Apply to bare soil prior to weed emergence. Rainfall or irrigation is required within 21 days to activate the herbicide. Maximum of 2 applications per year.	NR	A	ALL	R4
Norflurazon (Zoliar)	12**	Stone Fruit (apricots, cherries, nectarines, peaches, plums) / Directed Spray / Residual Weed Control	Registered in stone fruit for control of grass and broadleaf weeds, including Blackberry Nightshade . Apply as a directed spray to bare ground prior to emergence. Avoid contact with foliage or fruit. Do not apply to trees that have been established for less than 18 months.	NR	A	ALL	R4
Oryzalin	3**	Stone Fruit (apricot, cherry, nectarine, peach, plum & prune) / Directed Spray	Registered in stone fruit for control of grass & broadleaf weeds, including Blackberry Nightshade . Apply to bare soil using a directed spray at the base of the trees. Requires at least 15mm of irrigation or rain to activate.	NR	A	ALL	R4

Active Ingredient (Trade Name)	Chemical Group	Crop / Situation	Comment / Use / Weed	WHP (days)	Availability	States	Regulatory risk
Oxyfluorfen (Goal)	14**	Stone Fruit / Directed Spray	Registered in stone fruit for control of grass and broadleaf weeds, including Blackberry Nightshade . If weeds are already present, use as a spike in a mixture with glyphosate.	NR NG	A	ALL	R4
Aclonifen (Emerger) Bayer	32**		Bayer is expected to seek registration for pre-emergent control of grass and broadleaf weeds in various crops. Registered in Europe for use in potatoes, legume vegetables and cereals.		P		R4
Dimethenamid-P (Outlook)	15**		Registered for pre-emergent control of grass and broadleaf weeds in sweet corn, beans, peas, pumpkins and kabocha.		P		R4
S-Metolachlor (Dual Gold) Syngenta	15**		Registered for control of grass and broadleaf weeds in Brassica vegetables, Brassica leafy vegetables, sweet potatoes, spring onions, shallots, spinach, silverbeet, rhubarb, culinary herbs and beans.		P		R4
Morning Glory (<i>Ipomoea purpurea</i>) Priority: Moderate Morning Glory is rated as a moderate priority. Morning Glory is an annual, twining vine that chokes out competing plants rapidly.							
Amitrole	34**	Vineyards & Orchards / Directed Spray	Registered in vineyards and orchards for control of broadleaf weeds and grasses. Apply as a directed spray to small, actively growing weeds.	56	A	ALL	R3
Carfentrazone-ethyl + Glufosinate-ammonium (Hellcat) AgNova	14**+ 10**	Stone Fruit / Directed Spray	Registered in stone fruit for control of grass and broadleaf weeds, including Common Morning Glory . Apply as a directed spray when weeds are young and actively growing.	21 G:56	A	ALL	R3
Dichlobenil (Casoran)	29**	Orchards, including apples, apricots, citrus, peaches, plums & vineyards / Pre-Emergent Weed Control	Registered in orchards for control of annual grass and broadleaf weeds. Spread granules evenly over bare soil to be treated.	NR	A	ALL	R4

Active Ingredient (Trade Name)	Chemical Group	Crop / Situation	Comment / Use / Weed	WHP (days)	Availability	States	Regulatory risk
Glufosinate-ammonium (Basta)	10**	Stone Fruit Orchards / directed or shielded spray	Registered in stone fruit orchards for control of various grass and broadleaf weeds, including Common Morning Glory (<i>Ipomoea purpurea</i>). Do not allow spray to contact any part of the tree, including the trunk.	21 G:56	A	ALL	R3
Glufosinate-P- ammonium (Basta Ultra) BASF	10**	Stone Fruit Orchards / directed or shielded spray	Registered in stone fruit orchards for control of various grass and broadleaf weeds, including Common Morning Glory (<i>Ipomoea purpurea</i>). Do not allow spray to contact any part of the tree, including the trunk.	21 G:56	A	ALL	R3
Aclonifen (Emerger) Bayer	32**		Bayer is expected to seek registration for pre-emergent control of grass and broadleaf weeds in various crops. Registered in Europe for use in potatoes, legume vegetables and cereals.		P		R4
Dimethenamid-P (Outlook)	15**		Registered for pre-emergent control of grass and broadleaf weeds in sweet corn, beans, peas, pumpkins and kabocha.		P		R4
S-Metolachlor (Dual Gold) Syngenta	15**		Registered for control of grass and broadleaf weeds in Brassica vegetables, Brassica leafy vegetables, sweet potatoes, spring onions, shallots, spinach, silverbeet, rhubarb, culinary herbs and beans.		P		R4

5. References

5.1 Information:

Australian Pesticide and Veterinary Medicines Authority	www.apvma.gov.au
APVMA Chemical review	https://apvma.gov.au/chemicals-and-products/chemical-review/listing
MRL Databases (DAFF)	https://www.agriculture.gov.au/agriculture-land/farm-food-drought/food/nrs/databases
APVMA Permit search	https://productsearch.apvma.gov.au/permits
APVMA Product search	https://productsearch.apvma.gov.au/products
AUSVEG	https://ausveg.com.au
Cotton Pest Management Guide 2025-26	https://www.cottoninfo.com.au/publications/cotton-pest-management-guide
CropLife Australia (resistance management)	https://www.croplife.org.au/resources/programs/resistance-management/
Hort Innovation	www.horticulture.com.au

5.2 Abbreviations and Definitions:

APVMA	Australian Pesticides and Veterinary Medicines Authority
IPM	Integrated pest management
LOQ	Limit of quantification
MRL	Maximum residue limit (mg/kg or ppm)
Pesticides	Plant protection products (fungicide, insecticide, herbicide, nematocides, rodenticides, etc.).
Plant pests	Diseases, insects, nematodes, rodents, viruses, weeds, etc.
SARP	Strategic Agrichemical Review Process
TBC	To be confirmed
WHP	Withholding Period

5.3 Acknowledgements:

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

6. Appendices:

Appendix 1. Products available for disease control in prune and dried tree fruit

Appendix 2. Products available for control of insects and mites in prune and dried tree fruit

Appendix 3. Products available for weed control in prune and dried tree fruit

Appendix 4. Current permits for use in prune and dried tree fruit

Appendix 5. Prune and dried tree fruit Maximum Residue Limits (MRLs)

Appendix 6. Prune and dried tree fruit Agrichemical Regulatory Risk Assessment

Appendix 1. Products available for disease control in prune and dried tree fruit

Active Ingredient (Trade Name)	Chemical Group	Situation	Diseases / Comments	States	WHP Days	Regulatory Risk
BLAD (Problad Verde)	BM01	Stone Fruit	Brown Rot (<i>Monilinia</i> spp.) Suppression of: Blossom Blight (<i>Monilinia</i> spp.)	ALL	NR	R4
Bromo Chloro Dimethyl Hydatoin (BCDMH)	-	Sanitiser / Post- Harvest Treatment	External Rot Causing Organisms	ALL	NR	R4
Captan	M4	Stone Fruit / Except Apricots	Blossom Blight & Brown Rot (<i>Sclerotinia laxa</i> , <i>S. fructicola</i>)	ALL	7 G:7	R4
Chlorine	-	Sanitiser / Post- Harvest Treatment	Bacteria and Fungi	ALL	NR	R4
Chloropicrin + 1,3- Dichloropropene	8B	Soil Fumigant	Soil-borne diseases (including <i>Fusarium</i> & <i>Verticillium</i> Wilts, <i>Rhizoctonia</i> , <i>Pythium</i>)	ALL	NR	R4
Chlorothalonil (Bravo)	M5	Apricots	Brown Rot - Fruit (<i>Monilinia fructicola</i>) Blossom Blight (<i>Monilinia laxa</i>) Shot-Hole (<i>Stigmata carpophila</i>) Stone Fruit Rust (<i>Tranzschelia discolor</i>) Freckle (<i>Venturia carpophila</i>)	ALL	7	R2
		Nectarines	Shot-Hole (<i>Stigmata carpophila</i>) Brown Rot - Fruit (<i>Monilinia fructicola</i>) Blossom Blight (<i>Monilinia laxa</i>)			
		Peaches	Brown Rot - Fruit (<i>Monilinia fructicola</i>) Blossom Blight (<i>Monilinia laxa</i>) Shot-Hole (<i>Stigmata carpophila</i>) Stone Fruit Rust (<i>Tranzschelia discolor</i>) Leaf Curl (<i>Taphrina deformans</i>)			
		Plums	Brown Rot - Fruit (<i>Monilinia fructicola</i>) Blossom Blight (<i>Monilinia laxa</i>) Shot-Hole (<i>Stigmata carpophila</i>) Stone Fruit Rust (<i>Tranzschelia discolor</i>)		1	

Active Ingredient (Trade Name)	Chemical Group	Situation	Diseases / Comments	States	WHP Days	Regulatory Risk
Copper	M1	Apricots	Freckle Shot Hole	ALL	1	R4
			Bacterial Gummosis	ALL (excl. NSW)		
		Nectarines & Peaches	Shot Hole Leaf Curl (<i>Taphrina deformans</i>)	ALL		
		Plums	Shot Hole			
		Nectarines / Plums / Peaches	Phytophthora Stem Canker			
		Stone Fruit	Blossom Blight Freckle Rust Leaf Curl Shot Hole	ALL (excl. QLD)		
			Bacterial Spot Bacterial Canker Leaf Curl Shot Hole	QLD		
Cyprodinil (Chorus, Solaris)	9	Apricots / Nectarines / Peaches / Plums	Blossom Blight (<i>Monilinia laxa</i>) Brown Rot (<i>Monilinia fructicola</i>)	ALL	NR	R4
Dithianon (Delan)	M9	Apricots / Nectarines / Peaches / Plums	Brown Rot (<i>Monilinia fructicola</i>)	ALL (excl. WA)	21	R4
		Nectarines / Peaches	Leaf Curl (<i>Taphrina deformans</i>) Rust (<i>Uromyces</i> spp.)	ALL		
		Plums	Rust (<i>Uromyces</i> spp.)			
		Stone Fruit	Shot-Hole (<i>Stigmina carpophila</i>) Scab / Peach Blight			
Dodine (Syllit)	U12	Peaches / Nectarines	Peach Leaf Curl (<i>Taphrina deformans</i>) Blossom Blight (<i>Monilinia</i> spp.)	ALL	NR NG	R4

Active Ingredient (Trade Name)	Chemical Group	Situation	Diseases / Comments	States	WHP Days	Regulatory Risk
Fludioxonil (Scholar)	12	Stone Fruit / Post-Harvest	Brown Rot (<i>Monilinia fructicola</i>) Grey Mould (<i>Botrytis cinerea</i>) Rhizopus Rot (<i>Rhizopus stolonifer</i>)	ALL	NR	R4
Fluopyram + Trifloxystrobin (Luna Sensation) Bayer	7+11	Stone Fruit	Blossom Blight Shot-Hole Brown Rot	ALL	1 NG	R4
Fosetyl-Aluminium	33	Peaches	Collar Rot (<i>Phytophthora cactorum</i>)	ALL (excl. QLD)	NR	R3
Fosetyl-Aluminium PER85273	33	Apricot / Peach / Nectarine / Plum	Phytophthora Trunk & Collar Rot (<i>Phytophthora cactorum</i> , <i>P. cinnamomi</i> & <i>P. cambivora</i>)	ALL (excl. VIC)	NR	R3
Iodine	-	Sanitiser / Stone Fruit	Bacteria & Fungi	ALL	NR	R4
Iodocarb + Cyproconazole (Rapid Pruning Wound Dressing)	28+3	Apricots / Plums / Peaches	Silverleaf (<i>Chondrostereum purpureum</i>)	ALL (excl. WA)	NR	R3
Iprodione (Rovral)	2	Stone Fruit	Blossom Blight (<i>Monilinia laxa</i>) Brown Rot (<i>Monilinia fructicola</i>)	ALL	NR	R4
Mancozeb	M3	Stone Fruit	Brown Rot Rust Shot Hole Freckle	ALL	14	R2
Mandestrobin (Intuity) Sumitomo	11	Stone Fruit	Blossom Blight (<i>Monilinia laxa</i>) Brown Rot (<i>Monilinia fructicola</i>)	ALL	7 G:7	R4
Metiram (Polyram)	M3	Stone Fruit	Rust Shot-Hole	ALL	14	R4
Penthiopyrad (Fontelis) Corteva	7	Stone Fruits	Brown Rot / Blossom Blight (<i>Monilinia</i> spp.) Scab / Freckle (<i>Cladosporium carpophilum</i> , <i>Venturia carpophila</i>)	ALL	NR NG	R4
Potassium Bicarbonate (EcoCarb Plus)	M2	Nectarines	Brown Rot (<i>Monilinia fructicola</i> , <i>M. laxa</i>)	ALL	NR	R4

Active Ingredient (Trade Name)	Chemical Group	Situation	Diseases / Comments	States	WHP Days	Regulatory Risk
Procymidone (Sumisclex)	2	Stone Fruit	Blossom Blight (<i>Monilinia laxa</i>)	ALL	9	R4
Propiconazole	3	Apricots	Prune Rust (<i>Tranzschelia discolor</i>)	SA	1	R3
		Plums / Prune Production	Prune Rust (<i>Tranzschelia discolor</i>)	NSW, SA, VIC & WA		
		Stone Fruit / Blossom Phase	Brown Rot / Blossom Blight (<i>Monilinia laxa</i> , <i>Monilinia fructicola</i>)	ALL		
<i>Rhizobium rhizogenes</i> Strain K1026 (NoGall)	-	Stone Fruit	Crown Gall	ALL	NR	R4
<i>Streptomyces lydicus</i> (Actinovate) Novozymes BioAg	BM02	All Crops	Biological soil amendment to stimulate soil organisms to make nutrients more available for plant growth	ALL	NR	R4
Sulfur	M2	Peaches / Nectarines / Plums	Rust	ALL (excl. WA)	NR	R4
			Brown Rot (<i>Monilinia fructicola</i>) Blossom Blight (<i>Monilinia laxa</i>)	ALL		
Thiram	M3	Stone Fruits	Brown Rot – Fruit (<i>Monilinia fructicola</i>) Shot-Hole (<i>Stigmata carpophila</i>)	ALL	7	R2
		Apricot	Freckle (<i>Venturia carpophila</i>)			
Triforine (Saprol)	3	Peaches / Nectarines / Apricots / Plums	Blossom Blight (<i>Monilinia</i> spp.) Brown Rot (<i>Monilinia</i> spp.)	ALL	NR	R4
		Peaches / Nectarines / Apricots / Plums /Post-Harvest Dip	Brown Rot (<i>Monilinia fructicola</i> , <i>M.laxa</i>)			
Zineb	M3	Peaches / Prunes / Plums (not early varieties) / Nectarines	Rust	ALL	14	R2

Active Ingredient (Trade Name)	Chemical Group	Situation	Diseases / Comments	States	WHP Days	Regulatory Risk
Ziram	M3	Nectarines / Peaches	Blossom Blight (<i>Monilinia laxa</i>) Brown Rot (<i>Monilinia fructicola</i>) Shot-Hole (<i>Stigmina carpophila</i>) Leaf Curl (<i>Taphrina deformans</i>) Freckle (<i>Venturia carpophila</i>)	ALL	7	R2

Appendix 2. Products available for control of insects and mites in prune and dried tree fruit

Active Ingredient (Trade Name)	Chemical group	Situation	Pests / Comments	States	WHP Days	Regulatory Risk
4-(P-Acetoxyphenyl)-2-Butanone + Malathion	1B	Fruit Fly Trap	Queensland Fruit Fly	ALL	NR	R4
4-(P-Acetoxyphenyl) -2-Butanone + Fipronil	2B	Fruit Trees / Fruit Fly Trap	Queensland Fruit Fly (<i>Bactrocera tryoni</i>) Lesser Queensland Fruit Fly (<i>Bactrocera neohumeralis</i>)	ALL	NR	R2
(E,E) 8,10 Dodecadien-1-OL (Isomate-C)	-	Stone Fruits	Codling Moth	ALL (excl. WA)	NR	R4
(E,E) 8,10 Dodecadien-1-OL + Tetradecanol (Isomate-C/OFM)	-	Peach / Nectarine / Plum / Apricot	Codling Moth Oriental Fruit Moth	ALL (excl. WA)	NR	R4
Ethanol, Ethyl acetate, 2-methyl-1-propanol, 2-methyl-1-butanol + Ethanol, Acetaldehyde (Carpophilus Catcha Trapping System)	-	Peaches / Nectarines / Plums / Apricots	Carpophilus Beetles (<i>Carpophilus davidsoni</i> , <i>C. hemiptera</i> , <i>C. mutalis</i>)	ALL	NR	R4
1,3-Dichloropropene	-	Soil Fumigant	Plant parasitic nematodes	ALL	NR	R4
Acequinocyl (Kanemite) UPL	20B	Stone Fruit	Two-Spotted Mite (<i>Tetranychus urticae</i>)	ALL	14 NG	R4
Acetamiprid + Novaluron (Cormoran) Adama	4A+15	Stone Fruit	Black Peach Aphid (<i>Brachycaudus persicae</i>) Green Peach Aphid (<i>Myzus persicae</i>) Light Brown Apple Moth (<i>Epiphyas postvittana</i>) Oriental Fruit Moth (<i>Grapholita molesta</i>) San Jose Scale (<i>Quadraspidiotus perniciosus</i>) Suppression of: Mediterranean Fruit Fly (<i>Ceratitis capitata</i>) Queensland Fruit Fly (<i>Bactrocera tryoni</i>)	ALL	7 NG	R2
Alpha-Cypermethrin	3A	Apricots / Nectarine / Peach / Plums	Garden Weevil (<i>Phlyctinus callosus</i>) Apple Weevil (<i>Ortiorhynchus cribricollis</i>)	WA	14	R3

Active Ingredient (Trade Name)	Chemical group	Situation	Pests / Comments	States	WHP Days	Regulatory Risk
Alpha-Cypermethrin PER91059	3A	Stone Fruit / Except Cherries	Fruit Flies	ALL	7 NG	R3
<i>Bacillus thuringiensis subsp Kurstaki</i> Strain HD-1 (DiPel)	11A	Fruit	Armyworm (<i>Spodoptera</i> spp.) Cotton Bollworm (<i>Helicoverpa armigera</i>) Native Budworm (<i>Helicoverpa punctigera</i>) Cabbage Moth (<i>Plutella xylostella</i>) Cabbage White Butterfly (<i>Pieris rapae</i>) Green Looper (<i>Chrysodeixis eriosoma</i>) Light Brown Apple Moth (<i>Epiphyas postvittana</i>) Pear Looper (<i>Ectropis excursaria</i>) Soybean Looper (<i>Thysanoplusia orichalcea</i>) Vine Moth (<i>Phalaenoides glycinae</i> , <i>Agarista agricola</i>) Tobacco Looper (<i>Chrysodeixis argentifera</i>)	ALL	NR	R4
Bifenazate (Acramite)	20D	Apricots / Nectarines / Peaches / Plums	Two-Spotted Mite (<i>Tetranychus urticae</i>) European Red Mite (<i>Panonychus ulmi</i>) Bryobia Mite (<i>Bryobia rubrioculus</i>)	ALL	3 G:28	R4
Bifenthrin (Talstar)	3A	Peaches / Nectarines / Plums / Apricots	Carpophilus Beetles (<i>Carpophilus</i> spp.)	ALL	1	R3
Carbaryl	1A	Stone Fruit / Except Cherries	Budworms (<i>Heliothis</i> spp.) Light Brown Apple Moth Oriental Fruit Moth Green Treehopper Pear & Cherry Slug Red Shouldered Leaf Beetle Orange Fruit Borer Wingless Grasshopper Fruit-Tree Borer European Earwig	ALL	35	R2
Chlorantraniliprole (Altacor) FMC	28	Stone Fruit	Oriental Fruit Moth (<i>Grapholita molesta</i>) Light Brown Apple Moth (<i>Epiphyas postvittana</i>)	ALL	14 NG	R4

Active Ingredient (Trade Name)	Chemical group	Situation	Pests / Comments	States	WHP Days	Regulatory Risk
Chloropicrin + 1,3-Dichloropropene	8B	Soil Fumigant	Plant Parasitic Nematodes Symphylans Wireworms	ALL	NR	R4
Clofentezine (Apollo)	10A	Stone Fruit	Two-Spotted Mite (<i>Tetranychus urticae</i>) European Red Mite (<i>Panonychus ulmi</i>)	ALL	21	R4
Clothianidin (Samurai) Sumitomo	4A	Peaches / Nectarines	Oriental Fruit Moth Green Peach Aphid	ALL	7 NG	R2
		Stone Fruit	Queensland Fruit Fly Mediterranean Fruit Fly Carpophilus Beetle			
<i>Cydia pomonella</i> Granulosis Virus V22 (Grandex Biological Insecticide)	-	Stone Fruit	Oriental Fruit Moth (<i>Grapholita molesta</i>)	ALL	NR	R4
Deltamethrin (MagMed) Sustainable Ventures PER96797	3A	Stonefruit	Mediterranean Fruit Fly (<i>Ceratitis capitata</i>)	WA	NR	R4
Dimethoate PER13859	1B	Orchard Cleanup – Fruit Fly host crops following harvest	Fruit Fly	ALL	NR	R3
Etofenprox (Trebon) Sipcam	3A	Stone Fruit / Except Cherries	Queensland Fruit Fly Mediterranean Fruit Fly	ALL	3 NG	R4
Etoxazole (Paramite) Sumitomo	10B	Stone Fruit / Except Cherries	Two-Spotted Mite (<i>Tetranychus urticae</i>) European Red Mite (<i>Panonychus ulmi</i>) Bryobia Mite (<i>Bryobia rubrioculus</i>)	ALL	7 NG	R4
Etoxazole + Piperonyl Butoxide (Motto RMR) Imtrade	10B	Nectarines	Two-Spotted Mite (<i>Tetranychus urticae</i>) European Red Mite (<i>Panonychus ulmi</i>)	ALL	7	R4

Active Ingredient (Trade Name)	Chemical group	Situation	Pests / Comments	States	WHP Days	Regulatory Risk
Fenbutatin Oxide	12B	Peaches / Nectarines	Two-Spotted Mite (<i>Tetranychus urticae</i>) European Red Mite (<i>Panonychus ulmi</i>) Bryobia Mite (<i>Bryobia rubrioculus</i>)	ALL	14	R3
Fenbutatin Oxide + Hexythiazox (Sabamite) Sabachem	12B+10 A	Peaches / Nectarines	Two-Spotted Mite (<i>Tetranychus urticae</i>) European Red Mite (<i>Panonychus ulmi</i>)	ALL	14	R3
Hexythiazox (Calibre)	10A	Stone Fruit	Two-Spotted Mite European Red Mite	ALL	3	R4
Imidacloprid	4A	Stone Fruit	Green Peach Aphid Black Peach Aphid	ALL	21 NG	R2
Indoxacarb (Avatar)	22A	Stone Fruits	Budworms (<i>Helicoverpa</i> spp.) Oriental Fruit Moth (<i>Grapholita molesta</i>) Inland Katydid (<i>Caedicia simplex</i>) Lightbrown Apple Moth (<i>E. postvittana</i>) Pear and Cherry Slug (<i>Caliroa cerasi</i>) Apple Weevil (<i>Otiorhynchus cribricollis</i>) Fuller's Rose Weevil (<i>Asynonychus cervinus</i>) Garden Weevil (<i>Phlyctinus callosus</i>) Wingless Grasshopper (<i>Phaulacridium vittatum</i>) Suppression of: European Earwig (<i>Forficula auriculari</i>)	ALL	7 NG	R4
Malathion	1B	Stone Fruit	Black Peach Aphid Green Peach Aphid European Red Mite Oriental Fruit Moth	ALL	3	R4
		Fruit Trees / Bait	Fruit Fly			
Metaldehyde	-	Horticultural Crops	Snails & Slugs	ALL	7	R4

Active Ingredient (Trade Name)	Chemical group	Situation	Pests / Comments	States	WHP Days	Regulatory Risk
Methomyl	1A	Stonefruit including Nectarines, Peaches	Thrips Green Peach Aphid (<i>Myzus persicae</i>) Heliothis (<i>Helicoverpa</i> spp.) Monolepta Beetle	ALL	1 NG	R2
Milbemectin (Milbeknock) Sipcam	6	Stone Fruit	Two Spotted Mite (<i>Tetranychus urticae</i>)	ALL	14 NG	R4
Petroleum Oil	-	Stone Fruit / Except Prunes	San Jose Scale Oyster Shell Scale Bryobia Mite Eggs European Mite Eggs Two Spotted Mite	ALL NSW & QLD	1	R4
Pirimicarb (Pirimor)	1A	Stone Fruit	Green Peach Aphid Black Peach Aphid Cherry Aphid	ALL	2	R4
Potassium Salts of Fatty Acid (Natrasoap)	-	Fruit	Aphids Thrips Mealybug Two-Spotted Mite Spider Mite Whitefly	ALL	NR	R4
Propargite	12C	Stonefruit	Two Spotted Mite European Red Mite	ALL	7	R3
Pymetrozine (Chess) Syngenta	9B	Stone Fruit	Black Peach Aphid (<i>Brachycaudus persicae</i>) Black Cherry Aphid (<i>Myzus cerasi</i>) Green Peach Aphid (<i>Myzus persicae</i>)	ALL	28	R3
Pyrethrins (Pyganic)	3A	Stone Fruit	Clean up spray to control insects just prior to harvest such as: Fruit Fly Rutherglen Bug Spiders	ALL	NR	R4

Active Ingredient (Trade Name)	Chemical group	Situation	Pests / Comments	States	WHP Days	Regulatory Risk
Pyridaben (Sanmite)	10A	Stonefruit	Two Spotted Mite (<i>Tetranychus urticae</i>) European Red Mite (<i>Panonychus ulmi</i>)	ALL	1	R4
Pyriproxyfen (Distance Ant Bait) Sumitomo	7C	Tropical Fruit	Invasive & Nuisance Ants	ALL	NR	R4
Spinetoram (Delegate) Corteva	5	Stone Fruit	Pear & Cherry Slug Light Brown Apple Moth Oriental Fruit Moth Western Flower Thrips	ALL	3 NG	R4
Spinetoram (Delegate) Corteva PER12590	5	Stone Fruit	Suppression of: Queensland Fruit Fly (<i>Bactrocera tryoni</i>) Lesser Queensland Fruit Fly (<i>Bactrocera neohumeralis</i>)	ACT, NSW, QLD & NT	3	R4
			Suppression of: Mediterranean Fruit Fly (<i>Ceratitis capitata</i>)	WA		
			Suppression of: Fruit Fly	ALL (excl. VIC)		
Spinosad (Entrust Organic) Corteva	5	Stone Fruit / Excl. Peaches	Cherry Slug Light Brown Apple Moth	ALL	3	R4
		Peaches	Western Flower Thrips Oriental Fruit Moth		7	
Spinosad (Naturalure) Corteva	5	Tree, Fruit, Nut, Vine & Vegetable Crops / Fruit Fly Bait	Queensland Fruit Fly (<i>Bactrocera tryoni</i>) Mediterranean Fruit Fly (<i>Ceratitis capitata</i>)	ALL	NR	R4
Spiromesifen (Interrupt) Bayer	23	Stone Fruit	Two Spotted Mite (<i>Tetranychus urticae</i>)	ALL	14 NG	R4
Spirotetramat (Movento) Bayer	23	Stone Fruit	Tuber Mealybug (<i>Pseudococcus virburni</i>) Longtailed Mealybug (<i>Pseudococcus longispinus</i>) Black Cherry Aphid (<i>Myzus cerasi</i>) Black Peach Aphid (<i>Brachycaudus persicae</i>) San Jose Scale (<i>Quadraspidiotus perniciosus</i>)	ALL	21	R4

Active Ingredient (Trade Name)	Chemical group	Situation	Pests / Comments	States	WHP Days	Regulatory Risk
Spirotetramat (Movento) Bayer PER84804	23	Stone Fruit	Western Flower Thrips (<i>Frankliniella occidentalis</i>)	ALL (excl. VIC)	21	R4
Sulfoxaflor (Transform) Corteva	4C	Stone Fruit	Apple Dimpling Bug Black Peach Aphid Cherry Aphid Green Peach Aphid	ALL	7	R4
Tau-Fluvalinate (Mavrik)	3A	Nectarines / Peaches / Plums	Plague Thrips (<i>Thrips imaginis</i>)	ALL	NR	R4
Tebufenpyrad (Pyranica) Sipcam	21A	Peaches	Two Spotted Mite (<i>Tetranychus urticae</i>) European Red Mite (<i>Panonychus ulmi</i>)	ALL	14 NG	R4
Tetraniliprole (Vayego 200SC) Bayer	28	Stone Fruit	Apple Weevil (<i>Otiorhynchus cribricollis</i>) Fuller's Rose Weevil (<i>Asynonychus cervinus</i>) Garden Weevil (<i>Phlyctinus callosus</i>) Oriental Fruit Moth (<i>Laspeyresia molesta</i> syn <i>Grapholita molesta</i>) Mediterranean Fruit Fly (<i>Ceratitis capitata</i>) Suppression of: Dried Fruit Beetles (<i>Carpophilus</i> spp.)	ALL	3 NG	R4
Thiacloprid	4A	Stone Fruit (excl. peaches)	Oriental Fruit Moth	ALL	14 NG	R2
		Peaches			21 NG	
Thiacloprid PER14562	4A	Stone Fruit (excl. peaches)	Mediterranean Fruit Fly (<i>Ceratitis capitata</i>)	WA	14 NG	R2
		Peaches			21 NG	

Active Ingredient (Trade Name)	Chemical group	Situation	Pests / Comments	States	WHP Days	Regulatory Risk
Trichlorfon	1B	Stone Fruit	Queensland Fruit Fly	QLD, NSW, VIC, WA & NT	2 NG	R3
			Rutherglen Bug	NSW, VIC, TAS, SA & WA		
Trichlorfon PER14683	1B	Stone Fruit	Queensland Fruit Fly (<i>Bactrocera tryoni</i>) Mediterranean Fruit Fly (<i>Ceratitis capitata</i>)	ALL (excl. VIC)	7	R3

Appendix 3. Products available for weed control in prune and dried tree fruit

Active ingredient (Trade Name)	Chemical Group	Situation	Comment / Use / Weed	WHP (day s)	States	Regulatory Risk
2,2-DPA Dalapon	0**	Cherries / Peaches / Apricots	Annual & Perennial Grasses	7	ALL	R4
Amitrole	34**	Vineyards & Orchards	Broadleaf Weeds & Grasses	56	ALL	R3
Carfentrazone (Hammer)	14**	Stone Fruit	Australian Crassula / Stonecrop (<i>Crassula</i> sp.), Bifora (<i>Bifora testiculata</i>), Capeweed (<i>Arctotheca calendula</i>), Chickweed (<i>Stellaria media</i>), Common Storksbill (<i>Erodium cicutarium</i>), Spiny Emex (<i>Emex australis</i>), Marshmallow (<i>Malva parviflora</i>), Paterson's Curse (<i>Echium plantagineum</i>), Sub Clover (<i>Trifolium subterraneum</i>), Wild Radish (<i>Raphanus raphanistrum</i>)	NR G:14	ALL	R4
Carfentrazone-ethyl + Glufosinate- ammonium (Hellcat) AgNova	14**+10**	Stone Fruit	Grass & Broadleaf Weeds	21 G:56	ALL	R3
Clethodim	1***	Fruit Trees / Non- Bearing	Annual Ryegrass (<i>Lolium rigidum</i>), Annual Phalaris (<i>Phalaris minor</i>), Barley Grass (<i>Hordeum leporinum</i>), Barnyard Grass (<i>Echinochloa</i> spp.), Blown Grass (<i>Agrostis aveacea</i>), Brome Grass (<i>Bromus diandrus</i>), Crowsfoot Grass (<i>Eleusine indica</i>), Feathertop Rhodes Grass (<i>Chloris virgata</i>), Liverseed Grass (<i>Urochloa panicoides</i>), Paradoxa Grass (<i>Phalaris paradoxa</i>), Red Sprangletop Grass (<i>Leptochloa filiformis</i>), Seedling Johnson Grass (<i>Sorghum halepense</i>), Silver Grass (<i>Vulpia bromoides</i>) – suppression only (not QLD, WA), Summer Grass (<i>Digitaria</i> spp.), Volunteer Sorghum (<i>Sorghum</i> spp.), Volunteer Wheat (<i>Triticum aestivum</i>), Volunteer Oats (<i>Avena sativa</i>), Volunteer Barley (<i>Hordeum vulgare</i>), Winter Grass (<i>Poa annua</i>)	NR	ALL	R4

Active ingredient (Trade Name)	Chemical Group	Situation	Comment / Use / Weed	WHP (days)	States	Regulatory Risk
Dichlobenil (Casoran)	29**	Orchards, including apples, apricots, citrus, peaches, plums & vineyards	Annual Grass & Broadleaf Weeds	NR	ALL	R4
Fluazifop-P	1***	Stone Fruit / Spot- Spraying	Annual Ryegrass, Barley Grass, Barnyard Grass, Brome Grasses, Crowsfoot Grass, Johnson Grass, Liverseed Grass, Prairie Grass, Summer Grass (Crabgrass), Wild Oats, Innocent Weed, Stinkgrass, Foxtail Seedlings, Pigeon Grass, Bent Grass, Couch Grass, English Couch (Rope Twitch), Water Couch, Johnson Grass, Kikuyu Grass, Paspalum	NR	ALL	R4
Flumioxazin (Chateau)	14	Stone Fruit	Annual Ryegrass (<i>Lolium rigidum</i>), Barnyard Grass (<i>Echinochloa colona</i>), Blackberry Nightshade (<i>Solanum nigrum</i>), Bluetop (<i>Ageratum houstonianum</i>), Capeweed (<i>Arctotheca calendula</i>), Crassula (<i>Crassula colorata</i>), Creeping Speedwell (<i>Veronica persica</i>), Crowsfoot (<i>Eleusine indica</i>), Dwarf Nettle / Stinging Nettle (<i>Urtica urens</i>), Fat Hen (<i>Chenopodium album</i>), Feathertop Rhodes Grass (<i>Chloris virgata</i>), Fleabane (<i>Conyza bonariensis</i>), Green Summer Grass (<i>Brachiaria subquadriflora</i>), Hog Weed (<i>Polygonum aviculare</i>), Marshmallow (<i>Malva parviflora</i>), Milk Thistle (<i>Sonchus oleraceus</i>), Small-Flowered Mallow (<i>Modiola caroliniana</i>), Squirreltail Fescue (<i>Vulpia bromoides</i>), Summer Grass (<i>Digitaria ciliaris</i>), Toadrush (<i>Juncus bufonius</i>), Wild Mustard (<i>Sinapsis arvensis</i>), Wild Radish (<i>Raphanus raphanistrum</i>), Wild Rose (<i>Cleome aculeate</i>), Wild Turnip (<i>Brassica tournefortii</i>)	98	ALL	R4
Glufosinate-ammonium	10**	Stone Fruit Orchards	Grass and Broadleaf Weeds, including Flaxleaf Fleabane, Wireweed, Caltrop Burr, Annual Ryegrass, Couch Grass, Fat Hen, Capeweed, Barnyard Grass, Paspalum, Johnson Grass, Milk Thistle, Pigweed, Common Morning Glory	21 G:56	ALL	R3

Active ingredient (Trade Name)	Chemical Group	Situation	Comment / Use / Weed	WHP (day s)	States	Regulatory Risk
Glufosinate-P- ammonium (Basta Ultra) BASF	10**	Stone Fruit Orchards	Grass and Broadleaf Weeds, including Flaxleaf Fleabane, Wireweed, Caltrop Burr, Annual Ryegrass, Couch Grass, Fat Hen, Capeweed, Barnyard Grass, Paspalum, Johnson Grass, Milk Thistle, Pigweed, Common Morning Glory	21 G:56	ALL	R3
Glyphosate	9**	Stone Fruits / Directed or Shielded Spray	Grass and Broadleaf Weeds, including Amaranth, Barley Grass, Brome Grass, Barnyard Grass, Caltrop, Canary Grass, Capeweed, Chickweed, Dead Nettle, Double Gee, Liverseed Grass, Mintweed, Paterson's Curse, Pigweed, Ryegrass, Silver Grass, Spear Thistle, Thornapple, Wild Mustard, Wild Oats, Wild Turnip, Winter Grass, Variegated Thistle	NR	ALL	R3
Haloxypop (Verdict)	1***	Stone Fruit	Couch Grass, Rhodes Grass, Slender Rats Tail Grass, Buffel Grass, Green Panic, Johnson Grass, Kikuyu, <i>Paspalum</i> spp., <i>Setaria</i> spp., Annual Ryegrass, Barley Grass, Barnyard Grass, Brome Grass, Crowsfoot Grass, Lesser Canary Grass, Liverseed Grass, Mossman River Grass, Paradoxa Grass, Summer Grass, Volunteer Cereals, Wild Oats	NR	ALL	R4
Isoxaben (Gallery)	29**	Tree Fruits	Amaranth (Amaranthus spp.), Black Nightshade (Solanum nigrum), Caltrop (Tribulus terrestris), Capeweed (Arctotheca calendula), Chickweed (Stellaria media), Clovers (Trifolium spp.), Deadnettle (Lamium spp.), Erodium (Erodium spp.), Fat Hen (Chenopodium album), Flat Weed (Hypochaeris radicata), Indian Hedge Mustard (Sisymbrium orientale), Milk Thistle (Sonchus oleraceus), Ox Tongue (Picris echioides), Peppergrass (Lepidium spp.), Pigweed (Portulaca oleracea), Plantains (Plantago spp.), Salvation Jane (Echium plantagineum), Scarlet pimpernel (Anagallis arvensis), Small Flowered Mallow (Malva parviflora), Volunteer Canola (Brassica spp.), Wild Radish (Raphanus raphanistrum), Wireweed (Polygonum aviculare)	NR	ALL	R4
Napropamide (Devrinol)	0**	Stone Fruit	Annual Ryegrass, Barnyard Grass, Crowsfoot Grass, Innocent Weed, Liverseed Grass, Pigweed, Potato Weed, Redshank, Sowthistle, Stinkgrass, Summer Grass, Winter Grass	NR NG	ALL	R4

Active ingredient (Trade Name)	Chemical Group	Situation	Comment / Use / Weed	WHP (days)	States	Regulatory Risk
Nonanoic Acid	-	Orchards	Barneyard Grass, Camel Melon, Capeweed, Chickweed, Common Storksbill, Couch Grass, Clover, Fat Hen, Giant Brome Grass, Indian Hedge Mustard, Lambs Tongue, Peppergrass, Potato Weed, Perennial Ryegrass, Sowthistle, Stinking Roger, Whorled Pigeon Grass	NR	ALL	R4
Norflurazon (Zoliar)	12**	Stone Fruit (apricots, cherries, nectarines, peaches, plums)	Annual Ryegrass, Barley Grass, Blackberry Nightshade, Brachiaria (Green Summer Grass), Caltrop, Capeweed, Chickweed, Common Sowthistle (Milk Thistle), Dandelion seedlings, Curled Dock seedlings, False Caper seedlings, Fat Hen, Indian Hedge Mustard, Innocent Weed (Spiny Burgrass), Medic, Hedge Mustards, Paspalum, Plantain seedlings, Pigweed (Portulaca), Prairie Grass, Prickly Lettuce, Great Brome (Ripgut Brome), Salvation Jane, Scarlet Pimpernel, Shepherd's Purse, Silver Grass, Skeleton Weed seedlings, Sorrel seedlings, Soursob, Stinkgrass, Stinking Roger, Subterranean Clover, Summer Grass (Crabgrass), Threecornered Jack (Doublegee, Spiny Emex), Variegated Thistle, Wild Oats, Wild Radish, Wild Turnip, Winter Grass, Wireweed, Witch Grass, Yellow Weed, Yorkshire Fog Grass, Couch Grass, Dandelion, Curled Dock, False Caper, Johnson Grass, Skeleton Weed, Sorrel, Soursob	NR	ALL	R4
Oryzalin	3**	Stone Fruit (apricot, cherry, nectarine, peach, plum & prune)	Barneyard Grass, Guinea Grass, Love Grass, Paradoxa Grass, Pigeon Grass, Spiny Burr (Gentle Annie, Innocent Weed), Summer Grass, Crab Grass, Deadnettle, Fat Hen, Fumitory, Portulaca (Pigweed), Sowthistle, Wireweed (Hogweed), Brassica species, Blackberry Nightshade, Caltrop, Paddymelon, Silverleaf Nightshade	NR	ALL	R4

Active ingredient (Trade Name)	Chemical Group	Situation	Comment / Use / Weed	WHP (day s)	States	Regulatory Risk
Oxyfluorfen (Goal)	14**	Stone Fruit / directed spray	Amsinckia (<i>Amsinckia</i> spp.), Prickly Lettuce (<i>Lactuca</i> spp.), Barley Grass (<i>Hordeum leporinum</i>), Red Natal Grass (<i>Rhynchelytrum repens</i>), Barnyard Grass (<i>Echinochloa</i> spp.), Redshank (<i>Amaranthus cruentus</i>), Blackberry Nightshade (<i>Solanum nigrum</i>), Ryegrass (<i>Lolium</i> spp.), Bladder Ketmia (<i>Hibiscus trionum</i>), Sesbania Pea (<i>Sesbania cannabina</i>), Burrgrass (<i>Cenchrus australis</i>), Shepherd's Purse (<i>Capsella bursa-pastoris</i>), Caltrop (<i>Tribulus terrestris</i>), Small Flower Mallow (<i>Malva parviflora</i>), Capeweed (<i>Arctotheca calendula</i>), Soursob (<i>Oxalis pes-caprae</i>), Chickweed (<i>Stellaria media</i>), Sowthistle (<i>Sonchus oleraceus</i>), Crowsfoot Grass (<i>Eleusine indica</i>), Starburr (<i>Acanthospermum hispidum</i>), Deadnettle (<i>Lamium amplexicaule</i>), Stinkgrass (<i>Eragrostis cilianensis</i>), Fat Hen (<i>Chenopodium album</i>) Summer Grass (<i>Digitaria</i> spp.), Giant Pigweed (<i>Trianthema portulacastrum</i>), Thornapple (<i>Datura stramonium</i>), Liverseed Grass (<i>Urochloa panicoides</i>), White Eye (<i>Richardia brasiliensis</i>), Lovegrass (<i>Eragrostis</i> spp.), Wild Mustard (<i>Sisymbrium</i> spp.), Pigeon Grass (<i>Setaria</i> spp.), Wild Radish (<i>Raphanus raphanistrum</i>), Pigweed (<i>Portulaca oleracea</i>), Wireweed (<i>Polygonum aviculare</i>), Bellvine (<i>Ipomoea</i> spp.), Common Cotula (<i>Cotula australis</i>), Groundsel (<i>Senecio vulgaris</i>), Potato Weed (<i>Galinsoga parviflora</i>), Stinging Nettle (<i>Urtica urens</i>)	NR NG	ALL	R4
Pendimethalin (Stomp)	3**	Deciduous Fruits / Directed Spray / Residual Weed Control	Dwarf Amaranth, Green Amaranth, Annual Ryegrass, Asthma Plant (<i>Euphorbia hirta</i>), Barnyard Grass, Chickweed (<i>Stellaria media</i>), Crowsfoot Grass, Deadnettle (<i>Lamium amplexicaule</i>), Fat Hen (<i>Chenopodium album</i>), Pigeon Grass, Pigweed (<i>Portulaca oleracea</i>), Prickly Lettuce (<i>Lactuca serriola</i>), Sowthistle, Summer Grass, Winter Grass, Wireweed, Prairie Grass (<i>Bromus unioloides</i>), Spotted Medic (<i>Medicago arabica</i>)	NR	ALL	R4

Active ingredient (Trade Name)	Chemical Group	Situation	Comment / Use / Weed	WHP (days)	States	Regulatory Risk
Pendimethalin (Stomp) + Simazine	3** + 5**	Deciduous Fruits / Directed Spray / Residual Weed Control	Dwarf Amaranth, Green Amaranth, Annual Ryegrass, Asthma Plant (<i>Euphorbia hirta</i>), Barnyard Grass, Chickweed (<i>Stellaria media</i>), Crowsfoot Grass, Deadnettle (<i>Lamium amplexicaule</i>), Fat Hen (<i>Chenopodium album</i>), Pigeon Grass, Pigweed (<i>Portulaca oleracea</i>), Prickly Lettuce (<i>Lactuca serriola</i>), Sowthistle, Summer Grass, Winter Grass, Wireweed, Prairie Grass (<i>Bromus unioloides</i>), Spotted Medic (<i>Medicago arabica</i>), Cobbler's Peg (<i>Bidens pilosa</i>), Curious Weed (<i>Schkuhria pinnata</i>), Stinking Roger (<i>Tagetes minuta</i>), Caltrop (<i>Tribulus terrestris</i>)	NR	ALL	R4
Terbacil (Sinbar)	5**	Peaches / At Least 3 Years Old	Amaranthus, Barley Grass, Barnyard Grass, Bathurst Burr, Brome Grasses, Capeweed, Fat Hen, Innocent Weed, Milk Thistle, Paterson's Curse, Pigweed, Shepherd's Purse, Spiny Emex, Whorled Pigeon Grass, Wild Lettuce, Wild Oats, Wild Radish, Wild Turnip, Couch Grass, Kikuyu, Johnson Grass, Nutgrass	NR	ALL (excl. WA)	R4
Trifluralin	3**	Orchards & Vineyards	Annual Ryegrass, Barnyard Grass, Canary Grass, Caltrop, Crab Grass, Mossman River Grass, Pigweed, Redroot (Amaranthus), Redshank, Summer Grass, Wild Oats, Winter Grass, Wireweed, Columbus Grass, Guinea Grass, Johnson Grass, Liverseed Grass	NR	QLD, VIC, TAS, SA & WA	R4

Chemical Group Resistance Risk: ** Moderate, *** High

Appendix 4. Current permits for use in prune and dried tree fruit

Permit ID	Description	Date Issued	Expiry Date	Permit holder
PER14683 Version 3	Trichlorfon / Stone Fruit / Fruit Fly	24-Feb-15	31-Mar-27	Hort Innovation
PER14562 Version 4	Thiacloprid / Stone Fruit / Mediterranean Fruit Fly	13-Dec-13	31-May-27	Hort Innovation
PER91059 Version 2	Alpha-Cypermethrin / Stone Fruit except Cherries / Fruit Fly	30-Jun-21	30-Jun-27	Hort Innovation
PER85273 Version 2	Fosetyl-Aluminium / Apricot, Peach, Nectarine & Plum / Phytophthora Trunk & Collar Rot	23-Apr-18	31-Jan-28	Hort Innovation
PER84804 Version 3	Spirotetramat (Movento) / Stone Fruit / Western Flower Thrips	21-Jul-17	31-Dec-28	Hort Innovation
PER12590 Version 5	Spinetoram (Delegate) / Stone Fruit / Fruit Fly (suppression only)	06-Oct-11	31-May-29	Hort Innovation
PER13859 Version 4	Dimethoate / Orchard Cleanup Fruit Fly Host Crops / Fruit Fly	09-Feb-15	31-May-30	Hort Innovation
PER96797	Deltamethrin (MagMed) / Stonefruit / Mediterranean Fruit Fly	07-Apr-26	30-Apr-31	Sustainable Ventures

Appendix 5. Prune and dried tree fruit Maximum Residue Limits (MRLs)

CODEX commodity groupings of prunes, dried fruits, stone fruits and subgroups:

FS 0012	Stone fruits
FS 0012	Stone fruits (dried)
FS 0014	Plums
FS 2234	Plum
FS 2001	Peaches
FS 0245	Nectarine
FS 0247	Peach
DF 0014	Prunes
DF 0167	Dried Fruits
DF 0247	Peach, dried Fruit

Note: Major export markets for prunes include China, New Zealand, Chile, Fiji and Singapore. Available information indicates that in the absence specific limits in legislation the most countries defer to Codex, followed by EU MRL standards, or apply a 0.01ppm default value. Food exported to New Zealand from Australia may be legally sold if it complies with Australian requirements. MRLs and legislation are subject to change; the values presented should not be relied on.

Chemical	Codex	Description	APVMA MRL mg/kg	Codex MRL mg/kg
2,2-DPA	FS0012	Stone fruits	1	-
2,4-D	FS0012	Stone fruits	-	*0.05
Abamectin	FS0012	Stone fruits {except cherries}	T0.03	-
	FS0014	Plums (including prunes)	-	0.005
	FS2001	Peaches	-	0.03
Acequinocyl	FS0012	Stone fruits	0.7	-
	DF0014	Prunes	1	-
	DF0247	Peach, dried	1	-
Acetamiprid	FS0012	Stone fruits {except cherries}	0.5	-
	DF0014	Prunes	-	0.6
	FS0245	Nectarine	-	0.7
	FS0247	Peach	-	0.7
Acibenzolar-S-Methyl	FS2001	Peaches	-	0.2
Afidopyropen	FS0014	Plums (including prunes)	-	*0.01
	FS2001	Peaches	-	0.01
Aldrin and Dieldrin		Fruits	E0.05	-
Aminoethoxyvinylglycine	FS0012	Stone fruits {except cherries}	0.2	-
Amitrole	FS0012	Stone fruits	*0.02	*0.05
Azoxystrobin	FS0014	Plums (including prunes)	T0.8	-
	FS0012	Stone fruits	-	2
Bifenazate	FS0014	Plums (including prunes)	0.5	-
	FS0245	Nectarine	0.5	-
	FS0247	Peach	2	-
	FS0012	Stone fruits	-	2
Bifenthrin	FS0012	Stone fruits {except cherries}	1	-

Chemical	Codex	Description	APVMA MRL mg/kg	Codex MRL mg/kg
Boscalid	DF0014	Prunes	-	5
	FS0014	Plums (including prunes)	-	1.5
	FS2001	Peaches	-	4
Buprofezin	FS0014	Plums (including prunes)	-	2
	FS0245	Nectarine	-	9
	FS0247	Peach	-	9
Captan	FS0012	Stone fruits	15	-
	FS0014	Plums (including prunes)	-	10
	FS0245	Nectarine	-	3
	FS0247	Peach	-	20
Carbaryl	FS0012	Stone fruits	0.5	-
Carfentrazone-Ethyl	FS0012	Stone fruits	*0.05	-
Chlorantraniliprole	FS0012	Stone fruits	1	1
	DF0167	Dried fruits	2	-
Chlordane	FS0012	Stone fruits	E0.02	-
Chlorfenapyr	FS0247	Peach	1	-
Chlorothalonil	FS0014	Plums (including prunes)	10	-
	FS0245	Nectarine	7	-
	FS0247	Peach	30	-
	FS2001	Peaches	-	1.5
Chlorpyrifos	FS0012	Stone fruits	T1	-
	DF0167	Dried fruits	T2	-
Clofentezine	FS0012	Stone fruits	0.1	0.5
Clothianidin	FS0012	Stone fruits	3	0.2
	DF0014	Prunes	-	0.2
Cyanamide	FS0014	Plums (including prunes)	*0.02	-
Cyantraniliprole	DF0014	Prunes	-	0.8
	FS0014	Plums (including prunes)	-	0.5
	FS0247	Peach	-	1.5
Cyclaniliprole	DF0014	Prunes	-	0.6
	FS2001	Peaches	-	0.3
	FS0014	Plums (including prunes)	-	0.15
Cycloxydim	FS0012	Stone fruits	-	*0.09
Cyflumetofen	DF0247	Peach, dried	-	2
	FS2001	Peaches	-	0.3
Cyhalothrin (includes lambda-cyhalothrin)	FS0245	Nectarine	-	0.5
	FS0247	Peach	-	0.5
Cypermethrin	FS0012	Stone fruits {except cherries}	1	-
	FS0012	Stone fruits	-	2
Cyprodinil	FS0012	Stone fruits	*0.01	2
	FS0012	Stone fruits (dried)	0.05	-
	DF0014	Prunes	-	5
DDT		Fruits	E1	-
Deltamethrin	FS0014	Plums (including prunes)	-	0.05
	FS0245	Nectarine	-	0.05
	FS0247	Peach	-	0.05

Chemical	Codex	Description	APVMA MRL mg/kg	Codex MRL mg/kg
Diazinon	FS0247	Peach	0.7	-
		Fruits {except citrus fruits; grapes; olives; peach}	0.5	-
Dichlobenil	FS0012	Stone fruits	0.1	-
Dicofol		Fruits {except strawberry}	5	-
Difenoconazole	FS0014	Plums (including prunes)	T0.5	-
	DF0014	Prunes	-	4
	FS0012	Stone fruits	-	1.5
Diflubenzuron	FS0014	Plums (including prunes)	-	0.5
	FS0245	Nectarine	-	0.5
	FS0247	Peach	-	0.5
Dinotefuran	FS0245	Nectarine	-	0.8
	FS0247	Peach	-	0.8
Diphenylamine		Fruits {except apple; pear}	0.5	-
Diquat		Fruits	*0.05	-
	FS0012	Stone fruits	-	*0.02
Dithianon		Fruits {except blueberries}	2	-
	FS0012	Stone fruits	-	2
Dithiocarbamates	FS0012	Stone fruits	3	7
Dodine	FS0012	Stone fruits	*0.05	-
	FS0245	Nectarine	-	5
	FS0247	Peach	-	5
Enamectin Benzoate	FS0245	Nectarine	-	0.03
	FS0247	Peach	-	0.03
Ethephon	FS0245	Nectarine	0.01	-
	FS0247	Peach	0.5	-
Ethion	FS0012	Stone fruits	1	-
Ethyl Formate	DF0167	Dried fruits	1	-
Etofenprox	FS0012	Stone fruits {except cherries}	5	-
	FS0245	Nectarine	-	0.6
	FS0247	Peach	-	0.6
Etoxazole	FS0012	Stone fruits {except cherries}	0.3	-
Fenazaquin	DF0014	Prunes	-	3
	FS0014	Plums (including prunes)	-	0.5
	FS2001	Peaches	-	1.5
Fenbuconazole	FS0245	Nectarine	0.5	-
	FS0014	Plums (including prunes)	-	0.3
	FS0247	Peach	-	0.5
Fenbutatin Oxide	FS0245	Nectarine	3	-
	FS0247	Peach	3	7
	DF0014	Prunes	-	10
	FS0014	Plums (including prunes)	-	3
Fenhexamid	FS0014	Plums (including prunes)	-	1
	FS0245	Nectarine	-	10
	FS0247	Peach	-	10
Fenpropathrin	DF0014	Prunes	-	3
	FS0014	Plums (including prunes)	-	1

Chemical	Codex	Description	APVMA MRL mg/kg	Codex MRL mg/kg
Fenpyrazamine	FS0014	Plums (including prunes)	-	2
	FS2001	Peaches	-	4
Fenpyroximate	DF0014	Prunes	-	0.15
	FS0014	Plums (including prunes)	-	0.05
Fipronil	FS0012	Stone fruits	0.01	-
Flonicamid	FS0014	Plums (including prunes)	-	0.1
	FS2001	Peaches	-	0.7
Fluazifop-p-butyl	FS0012	Stone fruits	0.05	*0.01
Flubendiamide	FS0012	Stone fruits	-	2
Fludioxonil	FS0012	Stone fruits {except apricot; peach}	5	-
	FS0012	Stone fruits	-	Po5
	FS0247	Peach	10	-
Fluensulfone	DF0014	Prunes	-	0.3
	FS0012	Stone fruits	-	0.09
Flumioxazin	FS0012	Stone fruits	*0.02	*0.02
Fluopyram	FS0012	Stone fruits {except cherries}	2	-
	FS0014	Plums (including prunes)	-	0.5
	FS2001	Peaches	-	1
Flupyradifurone	DF0014	Prunes	-	3
	FS0014	Plums (including prunes)	-	0.4
	FS2001	Peaches	-	1.5
Flusilazole	FS0245	Nectarine	-	0.2
	FS0247	Peach	-	0.2
Flutriafol	DF0014	Prunes	-	0.9
	FS0014	Plums (including prunes)	-	0.4
	FS2001	Peaches	-	0.6
Fluvalinate	FS0012	Stone fruits	0.05	-
Fluxapyroxad	DF0014	Prunes	-	5
	FS0014	Plums (including prunes)	-	1.5
	FS2001	Peaches	-	1.5
Fosetyl	FS0012	Stone fruits {except cherries; peach}	T1	-
	FS0247	Peach	1	-
Glufosinate	FS0012	Stone fruits	*0.05	-
Glufosinate Ammonium & Glufosinate-P-Ammonium	DF0014	Prunes	-	0.3
	FS0012	Stone fruits	-	0.15
Glyphosate	FS0012	Stone fruits	0.2	-
Haloxypop	FS0012	Stone fruits	*0.05	*0.02
Hexythiazox	FS0012	Stone fruits	1	0.3
	DF0014	Prunes	-	1
Hydrogen Phosphide	DF0167	Dried fruits	-	Po0.01
Imidacloprid	FS0012	Stone fruits	0.5	-
	DF0014	Prunes	-	5
	FS0014	Plums (including prunes)	-	1.5
	FS2001	Peaches	-	1.5
Indazaflam	FS0012	Stone fruits	*0.01	-

Chemical	Codex	Description	APVMA MRL mg/kg	Codex MRL mg/kg
Indoxacarb	FS0012	Stone fruits {except cherries}	2	-
	FS0012	Stone fruits	-	1
	DF0014	Prunes	-	3
Inorganic Bromide	DF0014	Prunes	20	-
	DF0167	Dried fruits {except dried dates; figs; grapes; peach; prunes}	30	-
Iprodione	FS0012	Stone fruits	10	-
	FS2001	Peaches	-	*0.05
Isocycloseram	DF0014	Prunes	-	1.5
	FS0014	Plums (including prunes)	-	0.4
	FS2001	Peaches	-	0.3
Isofetamid	DF0014	Prunes	-	3
	FS0014	Plums (including prunes)	-	0.8
	FS2001	Peaches	-	3
Isopyrazam	FS0014	Plums	T0.7	-
	DF0014	Prunes	T3	-
Isoxaben	FS0012	Stone fruits	*0.01	-
Kresoxim-Methyl	FS0247	Peach	-	1.5
Lindane	FS0014	Plums (including prunes)	E0.5	-
	FS0247	Peach	E2	-
		Fruits {except apple; cherries; cranberry; grapes; peach; pineapple; plums; strawberry}	E0.5	-
Malathion	FS0012	Stone fruits	5	-
	DF0167	Dried fruits	8	-
Mandestrobin	FS0012	Stone fruits	3	-
Mefentrifluconazole	DF0014	Prunes	-	7
	FS0014	Plums (including prunes)	-	1.5
	FS2001	Peaches	-	2
Mesotrione	FS0012	Stone fruits	-	*0.01
Metalaxyl	FS0012	Stone fruits {except peach}	0.2	-
	FS0247	Peach	0.6	-
Metaldehyde		Fruits	1	-
Metconazole	DF0014	Prunes	-	0.5
	FS0014	Plums (including prunes)	-	0.1
	FS2001	Peaches	-	0.2
Methiocarb	FS0012	Stone fruits	*0.06	-
Methomyl	FS0012	Stone fruits {except cherries}	1	-
	FS0014	Plums (including prunes)	-	1
	FS0245	Nectarine	-	0.2
	FS0247	Peach	-	0.2
Methoxyfenozide	DF0014	Prunes	-	2
	FS0012	Stone fruits	-	2
Methyl Bromide	DF0167	Dried fruits	*0.05	-
		Fruits {except jackfruit; litchi; mango; papaya [pawpaw]}	T*0.05	-

Chemical	Codex	Description	APVMA MRL mg/kg	Codex MRL mg/kg
Metrafenone	FS2001	Peaches	-	0.7
Milbemectin	FS0012	Stone fruits	0.1	-
Myclobutanil	FS0014	Plums (including prunes)	-	2
	FS2001	Peaches	-	3
Napropamide	FS0012	Stone fruits	*0.1	-
Norflurazon	FS0012	Stone fruits	*0.2	-
Novaluron	FS0012	Stone fruits {except cherries}	0.5	-
	FS0012	Stone fruits	-	7
	DF0014	Prunes	-	3
Oryzalin		Fruits	0.1	-
Oxyfluorfen	FS0012	Stone fruits	0.05	-
Paclobutrazol	FS0012	Stone fruits	*0.01	-
Paraquat		Fruits {except olives}	*0.05	-
	FS0012	Stone fruits	-	*0.01
Penconazole	FS2001	Peaches	-	0.08
Pendimethalin	FS0012	Stone fruits	*0.05	-
Penthiopyrad	FS0012	Stone fruits	4	4
Permethrin	FS0012	Stone fruits	-	2
Phosphine	DF0167	Dried fruits	*0.01	-
Phosphorous acid	FS0012	Stone fruits {except cherries; peach}	T100	-
	FS0247	Peach	100	-
Piperonyl Butoxide	DF0167	Dried fruits	8	Po0.2
		Fruits	8	-
Pirimicarb		Fruits {except blackberries}	0.5	-
	FS0012	Stone fruits	-	3
Procymidone	FS0012	Stone fruits {except cherries}	2	-
Propargite	FS0012	Stone fruits	3	4
Propiconazole	FS0012	Stone fruits	2	-
	FS0014	Plums (including prunes)	-	Po0.4
	FS2001	Peaches	-	Po4
Pydiflumetofen	DF0014	Prunes	-	1.5
	FS0014	Plums (including prunes)	-	0.6
	FS2001	Peaches	-	1
Pymetrozine	FS0012	Stone fruits	*0.05	-
Pyraclostrobin	FS0014	Plums (including prunes)	-	0.8
	FS2001	Peaches	-	0.3
Pyrethrins	DF0167	Dried fruits	1	Po0.2
		Fruits	1	-
Pyridaben	FS0012	Stone fruits	0.5	-
Pyrimethanil	FS0014	Plums (including prunes)	-	2
	FS0245	Nectarine	-	4
	FS0247	Peach	-	4
Saflufenacil	FS0012	Stone fruits	-	0.01
Simazine		Fruits	*0.1	-

Chemical	Codex	Description	APVMA MRL mg/kg	Codex MRL mg/kg
Spinetoram	FS0012	Stone fruits	0.2	-
	FS0014	Plums (including prunes)	-	0.09
	FS0245	Nectarine	-	0.3
	FS0247	Peach	-	0.3
Spinosad	FS0012	Stone fruits	1	0.2
Spirodiclofen	FS0012	Stone fruits	-	2
Spiromesifen	FS0012	Stone fruits	0.6	-
Spirotetramat	FS0012	Stone fruits	1	3
	DF0014	Prunes	-	5
Sulfoxaflor	FS0012	Stone fruits {except cherries}	1	-
	FS0014	Plums (including prunes)	-	0.5
	FS2001	Peaches	-	0.4
Sulfuryl Flouride	DF0167	Dried fruits	0.07	Po0.06
Tebuconazole	FS0012	Stone fruits {except plums}	*0.01	-
	FS0014	Plums	T0.3	-
	DF0014	Prunes	T2	3
	FS0245	Nectarine	-	2
	FS0247	Peach	-	2
Tebufenozide	FS0245	Nectarine	-	0.5
	FS0247	Peach	-	0.5
Tebufenpyrad	FS0247	Peach	1	-
Terbacil	FS0247	Peach	*0.04	-
Tetraniliprole	FS0012	Stone fruits {except cherries}	0.7	-
	DF0014	Prunes	3	1.5
	FS0014	Plums (including prunes)	-	0.3
	FS2001	Peaches	-	0.7
Thiacloprid	FS0012	Stone fruits	2	0.5
Thiamethoxam	FS0012	Stone fruits	-	1
Trichlorfon	FS0012	Stone fruits	T3	-
	DF0167	Dried fruits	2	-
Trifloxystrobin	FS0012	Stone fruits	5	3
Trifluralin		Fruits	*0.05	-
Triforine	FS0012	Stone fruits	10	-

NOTE: MRLs are constantly under review and subject to change. Check for current MRLs and do not rely on the values stated above.

* Indicates that an MRL is at the Limit of Quantitation (LOQ)

T =Temporary MRL

E = The MRL is based on extraneous residues

Sources: APVMA MRLs: Agricultural and Veterinary Chemicals Code (MRL Standard) Instrument 2023. Compilation 16. Prepared 21 August 2026. CODEX MRLs: CODEX Alimentarius International Food Standards database (September 2026), <http://www.fao.org/fao-who-codexalimentarius/codex-texts/dbs/pestres/en/>

Appendix 6: Summer Fruit Agrichemical Regulatory Risk Assessment

Summer Fruit (Stone Fruit) Agrichemical Regulatory Risk Assessment

May 2026

Regulatory pressures on agrichemicals are increasing globally, with many being either restricted or withdrawn from use. For older agrichemicals, these pressures are often the result of reconsiderations involving new or refined risk assessment methodologies that require the generation of new data. A consequence of which can be that many of these agrichemicals are not meeting contemporary risk assessment standards as the necessary data is unavailable, or where data is available, the risk posed is considered unacceptable.

The use of agrichemicals can also be impacted through differences in standards between trading partners. The lack of an appropriate pesticide maximum residue limit (MRL) in an importing country can, for practical purposes, effectively prohibit use in the exporting country to ensure compliance, as MRL breach would adversely affect market access.

The effects of the above are greater regulatory pressure placed on the use of individual agrichemicals or chemical groups. Consequently, the number of approved agrichemical options could be adversely impacted.

To assist strategic planning, with respect to future pest management options, the following tables have been developed to highlight the regulatory threats to agrichemicals currently approved for the management of the pests and diseases in summer fruit in Australia, as well as assisting with any current initiatives aimed at identifying and addressing pest management deficiencies.

R0	Use no longer approved
R1	Short-term: Critical concern over retaining access < 1 year
R2	Medium-term: Maintaining access of significant concern <2-5 years
R3	Long-term: Potential issues associated with use – Monitoring required < 5 years
R4	No current risk/concerns

INSECTICIDES/MITICIDES/NEMATOCIDES - Insect and other pests

Blue text = new APVMA approved uses

Active Constituent	MoA Group	Pest	Risks and Comments
(E,E) 8,10 DODECADIEN-1-OL	--	Codling moth	Australia: No current concerns.
1-DODECANOL		Oriental fruit moth	Australia: No current concerns.
4-(P-ACETOXYPHENYL)-2-BUTANONE + FIPRONIL	2B	Queensland fruit fly Lesser Queensland fruit fly	4-(P-ACETOXYPHENYL)-2-BUTANONE Australia: No current concerns. FIPRONIL Australia: APVMA: Proposed Regulatory decision was expected by April 2026. APVMA is now advising the by end of 2026 at the earliest. Permit PER89402 Expiry date: 30/04/2027 EU: Not approved
4-(P-ACETOXYPHENYL)-2-BUTANONE + MALATHION	1B	Queensland fruit fly	4-(P-ACETOXYPHENYL)-2-BUTANONE Australia: No current concerns. MALATHION Australia: The final regulatory decision was published in an APVMA Special Gazette on 2 May 2024. Labels have been varied. Products bearing previously approved labels must not be supplied after 1 May 2026. Canada: In re-evaluation
ACEQUINOCYL	20B	Two-spotted (red spider) mite	Australia: No current concerns. UK: Withdrawn (2029).
ACETAMIPRID NOVALURON	4A + 15	Black peach aphid Fruit flies Green peach aphid Light brown apple moth Oriental fruit moth San Jose scale	ACETAMIPRID Australia: APVMA: Neonicotinoids chemical review has been delayed. The proposed regulatory decision unlikely before 2027. UK: Withdrawn (2033). Canada: In re-evaluation NOVALURON Australia: No current concerns.

Active Constituent	MoA Group	Pest	Risks and Comments
ALPHA-CYPERMETHRIN	3A	Apple weevil Garden weevil PER91059 for the control of Fruit Fly	Australia: APVMA nominated for reconsideration after 2029 . Permit PER91059 Expiry date: 30/06/2027 EU: Not approved
AMMONIUM ACETATE		Mediterranean Fruit Fly	Australia: No current concerns Permit PER96797 Expiry date: 30/04/2031
Bacillus thuringiensis	11A	Armyworm Cotton bollworm Native budworm Cabbage moth Cabbage white butterfly Loopers Lightbrown apple moth Vine moth	Australia: No current concerns.
BIFENAZATE	20D	Bryobia mite European red mite Two-spotted (red spider) mite	Australia: No current concerns. Codex MRL: 2 mg/Kg UK: Withdrawn (2029). Canada: In re-evaluation
BIFENTHRIN	3A	Dried fruit beetles (Carpophilus spp.)	Australia: APVMA nominated for reconsideration after 2029 . EU: Not approved Canada: Cancelled
CARBARYL	1A	European earwig Fruit-tree borer Green treehopper Helicoverpa species Light brown apple moth Orange fruit borer Oriental fruit moth Red shouldered leaf beetle Wingless grasshopper	Australia: No current concerns. EU: Not approved Canada: In re-evaluation Codex - being considered for periodic review
CARPOPHILUS AGGREGATION PHEROMONES		Carpophilus beetle	Australia: No current concerns
CHLORANTRANILIPROLE	28	Black cutworm Light brown apple moth Oriental fruit moth	Australia: No current concerns. Codex MRL: 1 mg/Kg Canada: In re-evaluation

Active Constituent	MoA Group	Pest	Risks and Comments
CHLORPYRIFOS	1B	--	Australia: The chemical review was completed in September 2024 . Most uses in horticultural crops were removed. After 30 September 2025, products with previously approved labels must not be supplied. The only remaining approved use is in Brassica crops as specified on current labels. EU: Not approved Canada: Cancelled
CLOFENTEZINE	10A	Bryobia mite European red mite Two-spotted (red spider) mite	Australia: No current concerns. Codex MRL: 0.5 mg/Kg EU: Not approved
CLOTHIANIDIN	4A	Fruit flies Green peach aphid (nectarine and peach) Oriental fruit moth (nectarine and peach) Carpophilus beetle	Australia: APVMA: Neonicotinoids chemical review has been delayed. The proposed regulatory decision unlikely before 2027. Codex MRL: 0.2 mg/Kg EU: Not approved Canada: In re-evaluation
COPPER	--	Snails	Australia: No current concerns.
CYDIA POMONELLA GRANULOSIS VIRUS	31	Oriental fruit moth	Australia: No current concerns.
DELTAMETHRIN	3A	Mediterranean Fruit Fly	Australia: No current concerns. Permit PER96797 Expiry date: 30/04/2031
DIAZINON	1B	San Jose scale, green peach aphid, black cherry aphid	Australia: APVMA made a Final Decision on 2024 . After 10 September 2025, crop uses are no longer approved. . Codex: All MRLs deleted EU: Not approved Canada: Cancelled
DIMETHOATE	1B	PER13859 for the control of fruit fly	Australia: APVMA: Prioritised to be commenced by 2029. Permit PER13859 Expiry date: 31/05/2030 EU: Not approved Canada: In re-evaluation
ETOXAZOLE	10B	Bryobia mite European red mite Two-spotted (red spider) mite	Australia: No current concerns. EU: Approved, candidate for substitution
FENBUTATIN OXIDE	12B	Bryobia mite (nectarine and peach) European red mite (nectarine and peach) Two-spotted (red spider) mite (nectarine and peach)	Australia: APVMA nominated for reconsideration after 2029 . EU: Not approved Canada: In re-evaluation

Active Constituent	MoA Group	Pest	Risks and Comments
FENITROTHION	1B	Locusts Small plague grasshopper Wingless grasshopper	Australia: On 15 August 2025, the APVMA made its final decision, cancelling field uses in horticultural crops (Gazette No. 12) . A deemed one-year permit allows possession, supply, and use of products with previously approved labels EU: Not approved Canada: Cancelled
FIPRONIL	2B	Queensland fruit fly (bait)	Australia: APVMA: Proposed Regulatory decision was expected by April 2026. APVMA is now advising the by end of 2026 at the earliest. Permit PER89402 Expiry date: 30/04/2027 EU: Not approved
HEXYTHIAZOX	10A	European red mite Two-spotted (red spider) mite	Australia: No current concerns. Codex MRL: 0.3 mg/Kg
HEXYTHIAZOX + PIPERONYLBUTOXIDE	10A	Two-spotted mite	HEXYTHIAZOX Australia: No current concerns. Codex MRL: 0.3 mg/Kg PIPERONYLBUTOXIDE Australia: No current concerns.
IMIDACLOPRID	4A	Black peach aphid Green peach aphid	Australia: APVMA: Neonicotinoids chemical review has been delayed. The proposed regulatory decision unlikely before 2027. EU: Not approved Canada: Very few uses allowed in greenhouses and seed treatment.
INDOXACARB	22A	Apple weevil Fuller's rose weevil Garden weevil Helicoverpa species Light brown apple moth Oriental fruit moth Wingless grasshopper	Australia: No current concerns. Codex MRL: 1 mg/Kg EU: Not approved
LAMBDA-CYHALOTHRIN	3A	PER12961 for the control of Mediterranean Fruit Fly & Queensland Fruit Fly	Australia: No current concerns. Permit PER12961 Expiry date: 31/03/2030 EU: Approved, candidate for substitution
MALATHION	1B	Black peach aphid Cherry aphid European red mite Fruit flies Green peach aphid Oriental fruit moth Rutherglen bug Wingless grasshopper	Australia: The final regulatory decision was published in an APVMA Special Gazette on 2 May 2024 . Labels have been varied. Products bearing previously approved labels must not be supplied after 1 May 2026. Canada: In re-evaluation
METALDEHYDE	--	Snails and slugs	Australia: No current concerns

Active Constituent	MoA Group	Pest	Risks and Comments
METHOMYL	1A	Green peach aphid Helicoverpa species Red shouldered leaf beetle Thrips	Australia: APVMA reconsideration. Was to start 2026. APVMA to publish a new Chemical Review priority list by mid 2026.
MILBEMECTIN	6	Two-spotted (red spider) mite	Australia: No current concerns.
PARAFFINIC OIL	UNM	European red mite Bryobia mite Frosted scale Mites Oystershell scale Pear scale San Jose scale Scale insects Spider mites (red spider) Two-spotted (red spider) mite	Australia: No current concerns.
PIPERONYL BUTOXIDE	--	--	Australia: No current concerns.
PIRIMICARB	1A	Black peach aphid Cherry aphid Green peach aphid	Australia: No current concerns.
PROPARGITE	12C	European red mite Mites Two-spotted (red spider) mite	Australia:
PUTRESCINE		Mediterranean Fruit Fly	Australia: No current concerns Permit PER96797 Expiry date: 30/04/2031
PYMETROZINE	9B	Black peach aphid Green peach aphid	Australia: APVMA nominated for reconsideration and spray drift assessment .
PYRETHRINS	3A	Fruit flies Rutherglen bug Spiders PER82426 for the control of Brown marmorated stink bug and yellow spotted stink bug	Australia: No current concerns. Permit PER82426 Expiry date: 31/01/2030
PYRETHRINS + PIPERONYLBUTOXIDE	3A	Whiteflies Caterpillars Earwigs Aphids Ants Thrips Leafhoppers Flies	PYRETHRINS Australia: No current concerns. Permit PER82426 Expiry date: 31/01/2030 PIPERONYLBUTOXIDE Australia: No current concerns.

Active Constituent	MoA Group	Pest	Risks and Comments
PYRIDABEN	21A	European red mite Two-spotted (red spider) mite	Australia: No current concerns.
SPINETORAM	5	Caterpillars Light brown apple moth Oriental fruit moth Pear and cherry slug Western flower thrips PER12590 for the control of Fruit Fly (suppression only)	Australia: No current concerns. Permit PER12590 Expiry date: 31/05/2029
SPINOSAD	5	Light brown apple moth Oriental fruit moth Pear and cherry slug Western flower thrips	Australia: No current concerns.
SPIROMESIFEN	23	Two-spotted mite	Australia: No current concerns.
SPIROTETRAMAT	23	Black peach aphid Cherry aphid Longtailed mealybug San Jose scale Tuber mealybug PER84804 for the control of Western flower thrips	Australia: No current concerns. Permit PER84804 Expiry date: 31/12/2028
SULFOXAFLOX	4C	Apple dimpling bug (yellow mirid) Black peach aphid Cherry aphid Green peach aphid	Australia: No current concerns.
SULFUR	UN	Bryobia mite Frosted scale San Jose scale	Australia: No current concerns.
TAU-FLUVALINATE	3A	Plague thrips (nectarine, peach and plum)	Australia: No current concerns.
TEBUFENPYRAD	21A	European red mite (peaches) Two-spotted (red spider) mite (peaches)	Australia: No current concerns.
TETRANILIPROLE	28	Apple weevil Dried fruit beetles (Carpophilus Spp.) Fuller's rose weevil Garden weevil Mediterranean fruit fly Oriental fruit moth	Australia: No current concerns.

Active Constituent	MoA Group	Pest	Risks and Comments
THIACLOPRID	4A	Green peach aphid Oriental fruit moth PER14562 for the control of Mediterranean Fruit Fly	Australia: APVMA: Neonicotinoids chemical review has been delayed. The proposed regulatory decision unlikely before 2027. Permit PER14562 Expiry date: 31/05/2027
TRICHLORFON	1B	Rutherglen Bug Queensland Fruit Fly PER14683 for the control of Mediterranean fruit fly	Australia: APVMA nominated for reconsideration after 2029. Permit PER14683 Expiry date: 31/03/2027
TRIMETHYLAMINE HYDROCHLORIDE		Mediterranean Fruit Fly	Australia: No current concerns Permit PER96797 Expiry date: 30/04/2031

FUNGICIDES – Disease Control

Blue text = new APVMA approved uses

Active Constituent	MoA Group	Pest	Risks and Comments
BLAD	BM01	Blossom blight Brown rot	Australia: No current concerns.
CAPTAN	M4	Brown rot Blossom blight	Australia: No current concerns.
CHLOROTHALONIL	M5	Blossom blight Brown rot Leaf curl Rust Shot hole	Australia: APVMA reconsideration. Prioritised to be commenced by 2028. EU: Not approved Canada: In re-evaluation USA: Under Registration Review (scheduled)
COPPER	M1	Bacterial canker / blast Bacterial spot Blossom blight Brown rot Freckle or scab Leaf curl Phytophthora stem rot Rust Shot hole Trunk and stem canker	Australia: No current concerns.
CYPROCONAZOLE + IODOCARB	3 + 28	Silverleaf fungus	CYPROCONAZOLE Australia: APVMA nominated for reconsideration after 2029. EU: Not approved IODOCARB Australia: No current concerns.
CYPRODINIL	9	Blossom blight Brown rot (apricots,nectarines,peaches,plums)	Australia: No current concerns. Codex MRL: 2 mg/Kg EU: Approved, candidate for substitution Canada: In re-evaluation
DITHIANON	M9	Brown rot Freckle and scab (apricot, nectarine and peach) Leaf curl (nectarine and peach) Peach blight Rust (nectarine, peach and plum) Shot hole	Australia: No current concerns. Codex MRL: 2 mg/Kg
DODINE	U12	Peach leaf curl (peaches and nectarines) Blossom blight (peaches and nectarines)	Australia: No current concerns. Canada: In re-evaluation

Active Constituent	MoA Group	Pest	Risks and Comments
FLUDIOXONIL	12	Brown rot Grey mould Transit rot (rhizopus soft rot)	Australia: No current concerns. Codex MRL: 5 mg/Kg EU: Approved, candidate for substitution
FLUOPYRAM TRIFLOXYSTROBIN	7 + 11	Blossom blight Shot hole	FLUOPYRAM Australia: No current concerns. TRIFLOXYSTROBIN Australia: No current concerns.
FOSETYL-ALUMINIUM	P07 (33)	PER85273 for the control of Phytophthora trunk and collar rot in apricot, peach, nectarine and plum.	Australia: Nominated for reconsideration after 2029 Permit PER85273 Expiry date: 31/01/2028
IODINE	M	Bactericide Fungi	Australia: No current concerns. Canada: Cancelled
IPRODIONE	2	Blossom blight Brown rot Stem end rot (Po) Transit rot (rhizopus soft rot – Po)	Australia: No current concerns. EU: Not approved USA: Under Registration Review (scheduled)
MANCOZEB	M3	Bacterial canker / blast Brown rot Freckle or scab Rust Shot hole Blossom blight	Australia: APVMA reconsideration. Prioritised to be commenced by 2027. EU: Not approved USA: Under Registration Review (scheduled)
MANDESTROBIN	11	Blossom blight Brown rot	Australia: No current concerns.
METALAXYL	4	Phytophthora trunk rot (P.cactorum and P.cinnamomi) (peaches)	Australia: No current concerns. EU: Approved, candidate for substitution Canada: In re-evaluation
METIRAM	M3	Rust Shot hole	Australia: APVMA reconsideration. Prioritised to be commenced by 2027. EU: Not approved Canada: Only approved for foliar applications in potato crops.
PENTHIOPYRAD	7	Blossom blight Brown rot Freckle or scab	Australia: No current concerns. Codex MRL: 4 mg/Kg EU: Not approved
POTASSIUM BICARBONATE	M2	Brown rot (nectarines)	Australia: No current concerns. Canada: In re-evaluation
PROCYMIDONE	2	Blossom blight	Australia: No current concerns. EU: Not approved

Active Constituent	MoA Group	Pest	Risks and Comments
PROPICONAZOLE	3	Brown rot	Australia: APVMA nominated for reconsideration and spray drift assessment . EU: Not approved Canada: In re-evaluation USA: Under Registration Review (scheduled)
RHIZOBIUM RHIZOGENES STRAIN K1026	--	Crown gall	Australia: No current concerns.
SULPHUR	M2	Blossom blight Brown rot Freckle or scab Leaf curl Rust Shot hole	Australia: No current concerns. Canada: In re-evaluation
THIRAM	M3	Brown rot Freckle or scab Shot hole	Australia: APVMA reconsideration. Prioritised to be commenced by 2027.
TRIFORINE	3	Brown rot Blossom blight (peaches,nectarines,apricots,plumsandprunes)	Australia: No current concerns.
ZINEB	M3	Rust	Australia: APVMA reconsideration. Prioritised to be commenced by 2027.
ZIRAM	M3	Blossom blight Brown rot Freckle or scab Leaf curl Shot hole	Australia: APVMA reconsideration. Prioritised to be commenced by 2027.

HERBICIDES – Weed Control

Blue text = new APVMA approved uses

Active Constituent	MoA Group	Risks and Comments
AMITROLE AMMONIUM THIOCYANATE	34 + 34	AMITROLE Australia: APVMA nominated for reconsideration after 2029. Codex MRL: 0.05 mg/Kg Canada: Cancelled AMMONIUM THIOCYANATE Australia: No current concerns
CLETHODIM	1	Australia: No current concerns.
DICHLORBENIL	29	Australia: No current concerns. EU: Not approved Canada: In re-evaluation
DIQUAT	22	Australia: APVMA: currently under review . Publication of the final regulatory decision is expected in Mid 2026. Codex MRL: 0.02 mg/Kg EU: Not approved
FLUAZIFOP-P	1	Australia: No current concerns
FLUMIOXAZIN	14	Australia: No current concerns. Codex MRL: 0.02 mg/Kg Canada: In re-evaluation
GLUFOSINATE-AMMONIUM CARFENTRAZONE-ETHYL	10 + 14	GLUFOSINATE-AMMONIUM Australia: Nominated for targeted spray drift reconsideration EU: Not approved Canada: In re-evaluation CARFENTRAZONE-ETHYL Australia: No current concerns. UK: Withdrawn (2033). Canada: In re-evaluation
GLYPHOSATE CARFENTRAZONE-ETHYL	9 + 14	GLYPHOSATE Australia: Nominated for targeted spray drift reconsideration USA: Under Registration Review (scheduled) CARFENTRAZONE-ETHYL Australia: No current concerns. UK: Withdrawn (2033). Canada: In re-evaluation

Active Constituent	MoA Group	Risks and Comments
HALOXYFOP	1	Australia: No current concerns. Codex MRL: 0.02 mg/Kg EU: Not approved
NAPROPAMIDE	0	Australia: No current concerns. Canada: In re-evaluation
NONANOIC ACID	--	Australia: No current concerns.
NORFLURAZON	12	Australia: No current concerns. EU: Not approved
ORYZALIN	3	Australia: No current concerns.
OXYFLUORFEN	14	Australia: No current concerns.
PARAQUAT	22	Australia: APVMA: Currently under review . Publication of the final regulatory decision is expected in Mid 2026. Candidate chemical recommended to be listed to Rotterdam Convention.
PENDIMETHALIN	3	Australia: No current concerns.
TERBACIL	5	Australia: No current concerns. Use in peaches
TRIFLURALIN	3	Australia: No current concerns.

FUMIGANTS

Blue text = new APVMA approved uses

Active Constituent	Use	Risks and Comments
1,3-DICHLOROPROPENE	Control of soil borne diseases, plant parasitic Nematodes, Symphylans and Wireworms	Australia: No current concerns. EU: Pending Canada: Cancelled
CHLOROPICRIN	Control of soil borne diseases, plant parasitic Nematodes, Symphylans and Wireworms	Australia: No current concerns. EU: Not approved USA: Restricted use
CHLOROPICRIN + 1,3-DICHLOROPROPENE	Control of soil borne diseases, plant parasitic Nematodes, Symphylans and Wireworms	CHLOROPICRIN Australia: No current concerns. EU: Not approved USA: Restricted use 1,3-DICHLOROPROPENE Australia: No current concerns. EU: Pending Canada: Cancelled
ETHANEDINITRILE	Soil borne pathogens, nematodes and weeds	Australia: No current concerns.
METHAM PRESENT AS SODIUM SALT	Germinating weeds and soil-borne fungus diseases	Australia: No current concerns.
METHYL BROMIDE	Disinfestation treatment of commodities to meet interstate and intrastate quarantine requirements	Australia: APVMA nominated for reconsideration after 2029. EU: Not approved Canada: Remaining pre-plant soil fumigation uses were cancelled (June 2025) USA: Restricted use

PLANT GROWTH REGULATORS AND OTHERS

Blue text = new APVMA approved uses

Active Constituent	Use	Risks and Comments
1-METHYLCYCLOPROPENE	Delays ripening and softening postharvest, extends shelf life in plums, nectarines and apricots.	Australia: No current concerns UK: Withdrawn (2034).
AMINOETHOXYVINYLGLYCINE	Enhances firmness over the harvest and storage periods and can delay maturity by about 3 days (depending on variety) leading to larger fruit.	Australia: No current concerns. EU: Not approved
AMMONIUM THIOSULPHATE	Thinning of blossoms and reducing fruit load in peaches and plums.	
CYANAMIDE	Promotes uniform and earlier budbreak in plums.	
ETHEPHON	Advancement and concentration of maturity in peaches.	
GIBBERELIC ACID	For reduction of flowering and fruiting thinning in the next cropping season.	
PACLOBUTRAZOL	Reduce vegetative growth.	

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