



Sweet Potato

Strategic Agrichemical Review Process
(SARP)

February 2026

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Purpose of the report:

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

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Innovation**
Strategic levy investment

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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 sweet potato 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

There were no high priority diseases identified but the following are moderate priority:

Common Name	Scientific Name
Scurf	<i>Monilochaetes infuscans</i>
Bacterial Soft Rot	<i>Erwinia</i> spp.
Fusarium Root Rot	<i>Fusarium solani</i>

1.2 Insects and mites

The high priority insect and mite pests are:

Common Name	Scientific Name
Root Knot Nematode	<i>Meloidogyne</i> spp.
Silverleaf Whitefly	<i>Bemisia tabaci</i>
Wireworm	<i>Arachnodima</i> spp., <i>Agrypnus</i> spp.
False Wireworms	<i>Gonocephalum</i> spp.

1.3 Weeds

The high priority weeds identified are:

Common name	Scientific name
Black Pigweed	<i>Trianthema portulacastrum</i>
Nut Grass	<i>Cyperus rotundus</i>

2. The Australian Sweet Potato Industry

The majority of sweet potatoes grown in Australia are produced in Queensland, with smaller volumes grown in northern New South Wales and Western Australia. Sweet potatoes can be produced all year round in the major production regions allowing for continual supply of the domestic market.

Total production for the year ending June 2024 was 89,203 tonnes¹. The value of production was \$69.6 m with 89% going to fresh supply, 10% to processing and 1% to fresh export. Total production and value have been stable for the past 3 years.

There are three main sweet potato varieties grown in Australia for the fresh market. The dominant variety is the Gold Sweet Potato (Beauregard) which accounts for 90% of fresh production, with Red Sweet Potato (Northern Star) making up 7% and Purple Sweet Potato the remaining 3%.

Fresh Sweet Potato Seasonality by State

State	23/24 Tonnes	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Queensland	78,498	High	High	High	Medium	Medium	Medium	Medium	Low	Low	Low	Low	Low
New South Wales	9,812							Medium	Medium	Low	High	High	High
Western Australia	892				Medium	Medium	Medium	High	High	Low	High	High	High
Availability Legend		Low	High		Medium	Medium			Low			None	

Exports of Australian sweet potatoes are small, accounting for about 1% of total production. The largest export destinations are the United Arab Emirates (43.7%), Singapore (23.2%) and Malaysia (10.7%) with smaller volumes going to Hong Kong, Thailand and other countries.

¹ Hort Innovation (2025). Australian Horticulture Statistics Handbook 2023/24. [online] Available at: <https://www.horticulture.com.au/growers/help-your-business-grow/research-reports-publications-fact-sheets-and-more/grower-resources/ha18002-assets/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 sweet potato 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 sweet potato industry regarding pesticide access, Hort Innovation undertook a review of the pesticide requirements via a Strategic Agrichemical Review Process (SARP) in 2023. The current project is to update the SARP with the latest information and progress.

The SARP process identifies diseases, insect pests and weeds of major concern to the sweet potato 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 sweet potato 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 sweet potato but attempts to prioritise the major problems.

Exotic plant pests, not present in Australia, are not addressed in this document.

3.2 Minor use permits and registration

From a pesticide access perspective, sweet potatoes fit within the APVMA crop group 016: Root and Tuber Vegetables, Subgroup 016B: Tuberous and Corm Vegetables. The APVMA classifies sweet potatoes as a minor crop. Reasonable justification is required in accordance with the APVMA's minor use guidance² to obtain minor use permits.

Possible justification for future permit applications could be based on:

- 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 chestnut industry is for manufacturers to register new pesticides uses in the crop.

² <https://apvma.gov.au/node/10931>

3.3 Methods

The current update of the Sweet Potato Strategic Agrichemical Review Process (SARP), which was last updated in 2023, was conducted by desktop audit using industry information gathered during 2025-2026. The process included gathering, collating and confirming information:

Process of Review	Activity
Industry consultation	Key industry personnel were contacted directly to ascertain whether pest priorities had changed since the 2023 update. Priority lists were updated using this feedback. A formal industry survey was not required due to the short turn around since the last SARP.
SARP data updated via a desktop audit	Updated registrations and permits. Updated MRL tables. Updated available and potential pesticides against low, moderate and high priority pests, including an assessment of their suitability. Included information on regulatory risks from MT24008. 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).
MT24008 – Regulatory Support & Response Co-ordination (pesticides) DTS Pty Ltd	Sweet Potato 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 Sweet Potato as well as current initiatives aimed at addressing identified pest management deficiencies.

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 sweet potato

Appendix 2. Products available for control of insects and mites in sweet potato

Appendix 3. Products available for weed control in sweet potato

Appendix 4. Current permits for use in sweet potato

Appendix 5. Sweet potato Maximum Residue Limits (MRLs)

Appendix 6. Sweet potato Agrichemical Regulatory Risk Assessment

4. Diseases, Pests and Weeds of Sweet Potato

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 instructions. Specific resistance management strategies may apply. These can be found, along with other useful information, on the CropLife Australia website³.

In Chapter 4 information on regulatory risk derived from project MT20007 (Regulatory support and coordination) has been incorporated.

Some of the suggested options have no overseas MRLs (see Appendix 5).

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.

³ <https://www.croplife.org.au/resources/programs/resistance-management/>

4.1 Diseases of sweet potato

4.1.1 Disease priorities

Common name	Scientific name
Moderate	
Scurf	<i>Monilochaetes infuscans</i>
Bacterial Soft Rot	<i>Erwinia</i> spp.
Fusarium Root Rot	<i>Fusarium solani</i>
Low	
Alternaria Leaf Spot	<i>Alternaria</i> spp.

There were no high priority diseases identified based on the feedback received, but Scurf, Bacterial Soft Rot and Fusarium Root Rot were nominated as moderate priority. Available and potential products for control of diseases are listed in Section 4.1.2.

Soil-borne diseases are the main issue faced by root vegetable growers. Outbreaks are favoured by warm, wet conditions particularly after rain events and in water-logged areas. Cultural controls are the most effective way to manage soil-borne disease in the longer term. These include crop rotation, cover cropping, general farm hygiene to destroy crop residues and remove weed hosts, and management of fields and irrigation practices to reduce waterlogging.

Resistance Management

Resistance by fungal pathogens to fungicides usually evolves following the intensive use of fungicides for disease control. In any fungal population there are likely to be individuals that have some degree of natural resistance, and which are less susceptible to fungicides, even before the chemicals are used. Resistance arises mainly through the incorrect use of fungicides, which selects for the resistant individuals. Continued use of a fungicide or fungicide chemical group can result in a significant build-up of resistant individuals in the fungal population – to the point where that particular product, or other products from the same chemical group, is no longer effective. In some cases, removal of the selection pressure can result in the fungal population regaining its sensitivity to the fungicide group, but this is not always the case. The risk of fungicide resistance developing varies between different chemical groups and different fungal pathogens, such that specific strategies are recommended for those situations considered to carry the highest risk. Croplife has resistance management strategies in place for various crops and diseases⁴.

⁴ 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
Scurf (<i>Monilochaetes infuscans</i>)							
Priority: Moderate							
Rated as a moderate priority. Scurf is favoured in alkaline to neutral pH soils, causing discoloured dark brown to black areas to develop on storage roots. Internal tissues are not affected. The primary means of spread of the disease is on planting material. Scurf can be managed effectively through an integrated system of sanitation, crop rotation and fungicide treatment of seed roots.							
Thiabendazole (Tecto) Syngenta	1	Protectant & Curative	NR	A	ALL	Registered in sweet potato seed roots for control of Scurf (<i>Monilochaetes infuscans</i>) and Root Rot (<i>Fusarium</i> spp.). Make one application prior to planting of seed roots. Allow dipped roots to dry prior to planting.	R4
Thiabendazole (Tecto) Syngenta PER12047	1	Protectant & Curative	NR	A	ALL (excl. VIC)	Permitted in sweet potato for control of Scurf and Fusarium Root Rot. Make one application only prior to planting of seed roots. Dip seed roots in the suspension for a duration of 1-2 minutes. Permitted in sweet potato for control of Scurf and Fusarium Root Rot. Make one application only prior to storing of seed roots. Apply the suspension as a fine mist over the sweet potatoes prior to storage.	R4

Disease / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Regulatory Risk
<i>Bacillus amyloliquefaciens</i> Strain QST 713 (Serenade Prime Soil Ameliorant and Biofungicide) Bayer	BM 02	Biological	NR	P-A	ALL	Registered in vegetables for application to soil to improve bioavailability of soil resources to horticultural crops.	R4
Azoxystrobin	11	Protectant		P		Registered as an in-furrow spray at planting for control of soil-borne Scurf in potatoes.	R4
Fludioxonil (Maxim Seed Treatment)	12	Protectant		P		Registered as a seed treatment for control of Scurf in potatoes.	R3
Fludioxonil + Sedaxane (Vibrance Premium) Syngenta	12+7	Protectant		P		Registered as a seed treatment for control of various soil-borne diseases including Black Scurf and Silver Scurf in potatoes.	R3
Imazalil (Magnate)	3	Protectant & Curative		P		Registered as a post-harvest treatment for control of Scurf in potatoes.	R4
Iprodione (Rovral)	2	Protectant		P		Registered as a seed treatment for control of Black Scurf in potatoes.	R4
Pencycuron (Monceren)	20	Protectant		P		Registered as a seed treatment for control of Scurf in potatoes.	R4
Quintozene (Terrachlor)	14	Protectant		P		Registered as a pre-plant soil treatment for control of Black Scurf in potatoes.	R4
Bacterial Soft Rot (<i>Erwinia</i> spp.)							
Priority: Moderate							
Rated as a moderate priority. Bacterial Soft Rot causes infected plants to wilt, and can result in a wet, slimy rot in storage roots. Infection occurs through injuries as a result of pest damage or during harvest. Most commonly a post-harvest issue. Control measures include ensuring good soil drainage, control nematodes that can act as vectors, removing plant residues after harvest and crop rotation.							
Chlorine	-	Sanitiser	NR	A	ALL	Registered as a sanitiser / post-harvest treatment for control of bacteria and fungi. Spray or dip harvested produce, minimum of 30 seconds contact time with treated water.	R4

Disease / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Regulatory Risk
Iodine	-	Sanitiser	NR	A	ALL	Registered in root crops as a sanitiser / post-harvest treatment for control of bacteria and fungi. Dip harvested produce, minimum of 1 minute contact time with treated water.	R4
Peroxyacetic Acid	M	Sanitiser / Post-Harvest Treatment	NR	A	ALL	Registered in sweet potatoes as a sanitiser / post-harvest treatment for control of bacteria. Spray or dip harvested produce.	R4
Copper	M1	Protectant	1	P-A	ALL	Registered in vegetables for control of Rust and Leaf Spot Diseases. Registered for control of Bacterial Leaf Spot in mangoes, stone fruit, beans, capsicum, brassicas, lettuce and tomatoes.	R4
<i>Bacillus amyloliquefaciens</i> strain QST713 (Serenade Opti) Bayer	BM 02	Biological	NR	P		Registered for suppression of Bacterial Spot in fruiting vegetables.	R4
<i>Bacillus amyloliquefaciens</i> strain MBI 600 (Serifel) BASF	BM 02	Biological	NR	P		Registered for control of Botrytis in grapevines and strawberries. US registration for control of <i>Erwinia spp.</i> in pome fruit and root & tuber vegetables.	R4
Fusarium Root Rot (<i>Fusarium solani</i>)							
Priority: Moderate							
Rated as a moderate priority. Fusarium causes lesions on the root surface and the underlying tissue becomes spongy and brown. Infection usually occurs through wounds, particularly during harvesting. The disease can be managed by an integrated approach using disease-free planting material, crop rotation, avoiding wounding during harvest, sanitation and proper curing after harvest.							
1,3-dichloropropene + Chloropicrin (Agrocelone)	8B	Soil Fumigant	NR	A	ALL	Registered in vegetables as a pre-plant soil fumigant for control of Plant Parasitic Nematodes, Symphylans, Wireworms, soil borne diseases (including <i>Fusarium</i> , <i>Verticillium</i> wilts, <i>Rhizoctonia</i> , & <i>Pythium</i>) and suppression of weeds. <i>For use by professional and registered fumigators only.</i>	R4

Disease / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Regulatory Risk
Dazomet (Basamid)	8F	Soil Fumigant	NR	A	ALL	Registered in crops as a pre-plant soil fumigant for control of soil fungi including <i>Pythium</i> , <i>Phytophthora</i> , <i>Sclerotinia</i> , <i>Sclerotium</i> , <i>Rhizoctonia</i> , <i>Verticillium</i> , <i>Plasmodiophora</i> , <i>Armillaria</i> and Fusarium spp. , Nematodes, plus insects, weeds & soil fungi. <i>For use by professional and registered fumigators only.</i>	R4
Metham Sodium	-	Soil Fumigant	NR	A	ALL	Registered in crops as a pre-plant soil fumigant for control of Fungal diseases including <i>Rhizoctonia</i> , <i>Pythium</i> , Fusarium , <i>Phytophthora</i> , <i>Verticillium</i> , <i>Sclerotinia</i> and Club Root of crucifers & Nematodes. <i>For use by professional and registered fumigators only.</i>	R4
<i>Streptomyces lydicus</i> WYEC108 (Actinovate) Novozymes Bioag	BM 02	Biological Seed Treatment	NR	A	ALL	Registered as a seed treatment in vegetables for control of Fusarium , <i>Rhizoctonia</i> and <i>Pythium</i> .	R4
Thiabendazole (Tecto) Syngenta	1	Protectant & Curative	NR	A	ALL	Registered in sweet potato seed roots for control of Scurf (<i>Monilochaetes infuscans</i>) and Root Rot (<i>Fusarium</i> spp.). Make one application prior to planting of seed roots. Allow dipped roots to dry prior to planting.	R4
Thiabendazole (Tecto) PER12047	1	Protectant & Curative	NR	A	ALL (excl. VIC)	Permitted in sweet potato for control of Scurf and Fusarium Root Rot . Make one application only prior to planting of seed roots. Dip seed roots in the suspension for a duration of 1-2 minutes. Permitted in sweet potato for control of Scurf and Fusarium Root Rot . Make one application only prior to storing of seed roots. Apply the suspension as a fine mist over the sweet potatoes prior to storage.	R4
<i>Bacillus amyloliquefaciens</i> Strain QST 713 (Serenade Prime Soil Ameliorant and Biofungicide) Bayer	BM 02	Biological	NR	P-A	ALL	Registered in vegetables for application to soil to improve bioavailability of soil resources to horticultural crops.	R4

Disease / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Regulatory Risk
Acibenzolar-S-Methyl (Bion Plant Activator) Syngenta	P01	Protectant		P		Registered as a seed treatment for suppression of Fusarium Wilt in cotton.	R4
<i>Bacillus amyloliquefaciens</i> strain MBI 600 (Serifel) BASF	BM 02	Biological	NR	P		Registered for control of Botrytis in grapevines and strawberries. US registration for control of Fusarium Wilt in root & tuber vegetables.	R4
Alternaria Leaf Spot (<i>Alternaria</i> spp.) Priority: Low							
Rated as a low priority. Alternaria is favoured during periods of warm temperatures and alternating wet and dry conditions, or under overhead irrigation. Small brown spots develop on the leaves but the disease rarely causes production losses.							
Copper	M1	Protectant	1	A	ALL	Registered in vegetables for control of Rust and Leaf Spot Disease . Apply as a foliar spray at first stage of disease. Use a retreatment interval of 7-14 days. Maximum number of applications not specified.	R4
Penthiopyrad (Fontelis) Corteva	7	Protectant	7 NG	A	ALL	Registered in sweet potato for control of Early Blight / Target Spot (<i>Alternaria</i> spp.) and Powdery Mildew (<i>Erysiphe</i> spp.) Maximum of 2 applications per crop, with a retreatment interval of 7-14 days.	R4
Pydiflumetofen + Difenconazole (Miravis Duo) Syngenta	7+3	Protectant & Curative	1 NG	A	ALL	Registered in sweet potato for control of Early Blight / Target Spot (<i>Alternaria</i> spp.) , Powdery Mildew (<i>Erysiphe</i> spp.) and Cercospora Leaf Spot (<i>Cercospora</i> spp.) Maximum of 2 applications per crop, with a retreatment interval of 7-10 days.	R3
Florypicoxamid (Verpixo Adavelt) Corteva	21	Protectant & Curative		P		Registered for control of Target Spot (<i>Alternaria solani</i>) in capsicum, chilli, eggplant, okra and tomato.	R4
Fluopyram + Trifloxystrobin (Luna Sensation) Bayer	7+11	Protectant & Curative		P		Registered for suppression of Alternaria Leaf Blotch in apples and control of <i>Alternaria passiflorae</i> in passionfruit.	R4

Disease / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Regulatory Risk
Fluxapyroxad + Pyraclostrobin (Merivon) BASF	7+11	Protectant & Curative		P		Registered for control of Alternaria Leaf Spot in almonds.	R4
Mefentrifluconazole (Belanty) BASF	3	Protectant & Curative		P		Registered for suppression of Alternaria in apples.	R4
Polyoxin D Zinc Salt (Intervene) Nufarm	19	Protectant		P		Registered for control of Grey Mould and Powdery Mildew in grapes and berries, and control of Powdery Mildew and Alternaria in Apples.	R4
<i>Bacillus amyloliquefaciens</i> strain MBI 600 (Serifel) BASF	BM 02	Biological	NR	P		Registered for control of <i>Botrytis</i> in grapes and strawberries. US registration for control of Alternaria in artichoke, asparagus, berries, brassica leafy vegetables, bulb vegetables, citrus, cucurbits, pome fruit, stone fruit and tobacco.	R4

4.2 Insect, mite and other pests of sweet potato

4.2.1 Insect, mite and other pest priorities

Common name	Scientific name
High	
Root Knot Nematode	<i>Meloidogyne</i> spp.
Silverleaf Whitefly	<i>Bemisia tabaci</i>
Wireworm	<i>Arachnodima</i> spp., <i>Agrypnus</i> spp.
False Wireworm	<i>Gonocephalum</i> spp.
Moderate	
Cotton / Melon Aphid	<i>Aphis gossypii</i>
Green Peach Aphid	<i>Myzus persicae</i>
Two Spotted Mite	<i>Tetranychus urticae</i>
Cluster Caterpillar	<i>Spodoptera litura</i>
Fall Armyworm	<i>Spodoptera frugiperda</i>
Sweet Potato Weevil	<i>Cylas formicarius</i>
White Fringed Weevil	<i>Naupactus leucoloma</i>
Vegetable Weevil	<i>Listroderes difficilis</i>
Symphylids	<i>Scutigera immaculata</i>
Vegetable Leafhopper	<i>Austroasca viridigrisea</i>
Low	
Potato Moth	<i>Phthorimaea operculella</i>
Cotton Bollworm	<i>Helicoverpa armigera</i>
Native Budworm	<i>Helicoverpa punctigera</i>
Black Field Cricket	<i>Teleogryllus commodus</i>
Mole Cricket	Gryllotalpidae
Green Vegetable Bug	<i>Nezara viridula</i>
Rutherglen Bug	<i>Nysius vinitor</i>
Western Flower Thrips	<i>Frankliniella occidentalis</i>
Plague Thrips	<i>Thrips imaginis</i>
Tomato Thrips	<i>Frankliniella schultzei</i>
Onion Thrips	<i>Thrips tabaci</i>

Common name	Scientific name
Wingless Grasshopper	<i>Phaulacridium vittatum</i>
Tomato Potato Psyllid	<i>Bactericera cockerelli</i>
Leafminers	<i>Liriomyza</i> spp.

The high priority insect, mite and other pests identified were Root Knot Nematode, Silverleaf Whitefly and Wireworms (True & False Wireworms). Available and potential products for insect, mite and other pests are listed in Section 4.2.2.

The broad range of insect and mite pests in sweet potato increases the importance of adopting an Integrated Pest Management approach. Pest management strategies should aim to use multiple methods of control, including cultural, biological and chemical measures.

Resistance Management

Insecticide resistance is a risk to effective control for some insect groups, particularly if there is an over-reliance on a limited number of insecticides. Growers should adhere to the resistance management strategies outlined on the CropLife website⁵. Growers should not exceed the maximum number of applications permitted on the insecticide label.

⁵ 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
Root Knot Nematode (<i>Meloidogyne</i> spp.)								
Priority: High								
Rated as a high priority. Nematodes are microscopic, wormlike soil pests that feed directly on sweet potato roots, particularly during early root development. They cause severe economic damage to sweet potato if not controlled. The use of nematicides can be supplemented with cultural controls, such as crop rotation, use of biofumigants, removing previous crop residues and maintaining weed-free fallows.								
1,3-dichloropropene + Chloropicrin (Agrocelone)	8B	Soil Fumigant	NR	A	ALL	Registered in vegetables as a pre-plant soil fumigant for control of Plant Parasitic Nematodes , Symphylans, Wireworms, soil borne diseases (including <i>Fusarium</i> , <i>Verticillium</i> wilts, <i>Rhizoctonia</i> , & <i>Pythium</i>) and suppression of weeds. <i>For use by professional and registered fumigators only.</i>	-	R4
Abamectin (Tervigo) Syngenta	6	Contact	NR	A	ALL	Registered in sweet potato for control of Root Knot Nematode . Apply via trickle irrigation no later than 3 days after transplanting. Follow the initial transplant application with up to 4 applications via the trickle irrigation at 14 day intervals. Do not apply more than 5 applications per crop.	M Bee:H	R3

Pest / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Impact on beneficials	Regulatory Risk
Dazomet (Basamid)	8F	Soil Fumigant	NR	A	ALL	Registered in crops as a pre-plant soil fumigant for control of soil fungi including <i>Pythium</i> , <i>Phytophthora</i> , <i>Sclerotinia</i> , <i>Sclerotium</i> , <i>Rhizoctonia</i> , <i>Verticillium</i> , <i>Plasmodiophora</i> , <i>Armillaria</i> and <i>Fusarium</i> spp., Nematodes , plus insects, weeds & soil fungi. <i>For use by professional and registered fumigators only.</i>	-	R4
Fluazaindolizine (Salibro Reklemel) Corteva	N-UN	Contact	NR	A	ALL	Registered in sweet potato for control of Root Knot Nematode . Apply either at establishment through trickle irrigation (3 days before to 3 days after planting) or soil applied and incorporated up to 3 days before transplanting. Apply a maximum of 2 applications. A post-plant application can be used at 14-21 days after transplanting following an application at planting through trickle irrigation, or following a planting application of another nematicide.	-	R4
Fluensulfone (Nimitz) Adama	-	Contact	NR	A	ALL	Registered in sweet potato for control of Root Knot Nematode . Apply at a minimum of 7 days prior to planting to the soil and incorporate to a depth of 15-20 cm as soon as possible. Do not use more than 1 application per crop.	-	R4
Fluopyram (Velum Prime) Bayer	N-3	Contact	NR	A	ALL	Registered in root & tuber vegetables for control of Root Knot Nematode (<i>Meloidogyne</i> spp.) and Root Lesion Nematode (<i>Pratylenchus</i> spp.) Apply through trickle or drip irrigation within 14 days (ideally 1-10 days) of planting or transplant to protect developing tubers from damage, or later in the season (not later than 4 months after planting) provided that a nematicide with an alternate mode of action is used to provide early protection. Maximum of 1 application per year.	-	R4
Metham Sodium	-	Soil Fumigant	NR	A	ALL	Registered in crops as a pre-plant soil fumigant for control of Fungal diseases including <i>Rhizoctonia</i> , <i>Pythium</i> , <i>Fusarium</i> , <i>Phytophthora</i> , <i>Verticillium</i> , <i>Sclerotinia</i> and Club Root of crucifers & Nematodes . <i>For use by professional and registered fumigators only.</i>	-	R4

Pest / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Impact on beneficials	Regulatory Risk
Oxamyl (Vydate) Corteva	1A	Contact	NR	A	ALL (excl. TAS)	Registered in sweet potato for control of Root Knot Nematode . Apply through trickle irrigation, with an initial application within 7 days of planting, followed by 4 further applications at 14 days intervals.	-	R4
Cyclobutrifluram (Vaniva Tymirium) Syngenta	N-3			P		Registered for control of Root-Knot Nematode (<i>Meloidogyne</i> spp.) in fruiting vegetables and cucurbits.	-	R4
Silverleaf Whitefly (<i>Bemisia tabaci</i>)								
Priority: High								
Rated as a high priority. Nymphs and adults are sap-sucking and cause leaf stippling and stunt growth of the plant. Natural enemies are effective at keeping whitefly populations in check. Avoiding the use of disruptive insecticides for control of other pests will assist in managing Silverleaf Whitefly.								
Afidopyropen (Versys) BASF	9D	Ingestion	7	A	ALL	Registered in sweet potato for control of Green Peach Aphid (<i>Myzus persicae</i>), Cabbage Aphid (<i>Brevicoryne brassicae</i>), Currant Lettuce Aphid (<i>Nasonovia ribis-nigr</i>), Cotton Aphid (<i>Aphis gossypii</i>) and suppression of Silverleaf Whitefly (<i>Bemisia tabaci</i>). Maximum of 2 applications per crop, re-treatment interval not specified.	L Bee:L	R4
Flupyradifurone (Sivanto Prime) Bayer	4D	Contact & Ingestion	7	A	ALL	Registered in sweet potato for control of Green Peach Aphid (<i>Myzus persicae</i>) and Silverleaf Whitefly (<i>Bemisia tabaci</i>). Maximum of 2 applications per year, with a minimum retreatment interval of 7 days.	L Bee:L	R4
Garlic + Chilli + Pyrethrins + Piperonyl Butoxide	3A	Contact	1	A	ALL	Registered in vegetables for control of Ants, Aphids, Caterpillars, Earwigs, Whitefly , Thrips and Leafhoppers. Suitable for organic growers. Apply as a cover spray and re-apply as necessary every 2-3 weeks.	VH Bee:H	R4
Imidacloprid (Confidor)	4A	Contact & Ingestion	NR	A	ALL	Registered in sweet potato for control of Silverleaf Whitefly . Apply once only, either by sub-surface trickle irrigation at 5-7 days after planting (or 5-7 days from seed emergence if planted from seed), or as a furrow spray pre-plant, applying a narrow band spray centred under the plant row to open furrow not earlier than 5 days prior to planting.	M Bee:M	R2

Pest / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Impact on beneficials	Regulatory Risk
Potassium Salts of Fatty Acids (Natrasoap)	-	Contact	NR	A	ALL	Registered in vegetables for control of Aphids, Thrips, Mealybug, Two Spotted Mites, Spider Mite and Whitefly . Maximum number of applications not specified, re-treatment interval 5-7 days.	L Bee:L	R4
Pyriproxyfen (Admiral) Sumitomo	7C	IGR / Ingestion	7	A	ALL	Registered in sweet potato for control of Silverleaf Whitefly . Maximum of 2 applications per season, with a minimum re-treatment interval of 14 days.	VL Bee:L	R4
Pyriproxyfen + Piperonyl Butoxide (Patriarch RMR) Imtrade	7C	IGR / Ingestion	7	A	ALL	Registered in sweet potato for control of Silverleaf Whitefly . Maximum of 2 applications per season, with a minimum re-treatment interval of 14 days.	VL Bee:L	R4
Spirotetramat (Movento) Bayer	23	Ingestion	7	A	ALL	Registered in sweet potato for control of Green Peach Aphid and Silverleaf Whitefly . Maximum of 3 applications per season, with a minimum re-treatment interval of 7 days.	M Bee:VL	R4
Cyantraniliprole (Benevia) FMC PER84805	28	Ingestion	14 NG	P-A	ALL (excl. VIC)	Permitted in sweet potato for control of Tomato Potato Psyllid. Registered for control of Silverleaf Whitefly in fruiting vegetables, cucurbits and potatoes.	L-M Bee:VH	R4
<i>Beauveria bassiana</i> (Velifer) BASF	UN	Biological	NR	P		Registered for suppression of various pests including Western Flower Thrips, Onion Thrips, Greenhouse Whitefly, Silverleaf Whitefly , Sweet Potato Whitefly, Green Peach Aphid & Two-Spotted Spider Mites in protected vegetables and ornamentals.	L Bee:L	R4
<i>Clitoria ternatea</i> Extract (Sero-X) Growth Agriculture	-	Biological		P		Registered in cotton for control of <i>Helicoverpa</i> spp., Green Mirids and Silverleaf Whitefly and in brassica leafy vegetables for control of Diamondback Moth. Label extension has been submitted seeking to add new uses for control of Silverleaf Whitefly and Thrips in brassicas and cucurbits.	L Bee:VL	R4
Dimpropridaz (Efficon) BASF	UN			P		Registered for control of Silverleaf Whitefly in cucurbits, fruiting vegetables and cotton.	-	R4

Pest / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Impact on beneficials	Regulatory Risk
Fonicamid (Mainman) ISK	29	Ingestion		P		Registered for control of Aphids and Silverleaf Whitefly in cucurbits; Aphids in potatoes; Aphids and Mealybugs in apples and pears; and Aphids and Mirids in cotton. US registration for control of Aphids and Plant Bugs in legume vegetables.	M Bee:L	R4
<p>Wireworm (<i>Arachnodima</i> spp., <i>Agrypnus</i> spp.) False Wireworms (<i>Gonocephalum</i> spp.) Priority: High</p> <p>Rated as a high priority. Wireworms are soil-dwelling pests, and the larvae cause direct feeding damage to sweet potato tubers. False Wireworm larvae cause deeper holes and are most abundant in late winter and spring. True Wireworm damage is characterised by shallow holes in the tubers, most commonly occurring in the winter.</p>								
1,3-dichloropropene + Chloropicrin (Agrocelone)	8B	Soil Fumigant	NR	A	ALL	Registered in vegetables as a pre-plant soil fumigant for control of Plant Parasitic Nematodes, Symphylans, Wireworms , soil borne diseases (including <i>Fusarium</i> , <i>Verticillium</i> wilts, <i>Rhizoctonia</i> , & <i>Pythium</i>) and suppression of weeds. <i>For use by professional and registered fumigators only.</i>	-	R4
Bifenthrin (Talstar)	3A	Contact	NR	A	QLD, NSW, SA, WA & NT	Registered in sweet potato for control of Wireworm (<i>Heteroderes</i> spp.) and Sweet Potato Weevil (<i>Cylas formicarius</i>). Apply as a soil surface spray in front of a rotary hoe working at a depth of 30cm at 1-5 days prior to planting.	VH Bee:H	R3
Fipronil (Regent)	2B	Contact	NR	A	ALL	Registered in sweet potato for control of Wireworm , Mole Cricket and White Fringed Weevil. Apply as a broadcast spray to the soil surface and incorporate to a depth of 15cm prior to planting.	M Bee:VH	R2
Phorate (Thimet)	1B	Contact	91 G:70	A	ALL	Registered in sweet potato for control of Aphids, Thrips, Jassids, Two-Spotted Mite and Wireworms . Distribute granules evenly in the furrow or band granules on each side of the row at planting time.	H Bee:H	R3

Pest / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Impact on beneficials	Regulatory Risk
Broflanilide (Vedira) BASF	30	Contact & Ingestion		P		Registered as an ant bait. It also has potential uses as a seed treatment for the control of Wireworms and other soil pests, and a foliar treatment for the control of chewing pests in various crops. Cimegra® (Broflanilide 100 g/L) has Canadian registration in corn and potatoes for the control of wireworms and corn rootworm applied as an in-furrow treatment at planting.	-	R4
Isocycloseram (Equento) Syngenta	30	Contact & Ingestion		P		Registered as seed treatment for control of various soil pests, including Bronze Field Beetle and Vegetable Beetle, in canola.	-	R4
Tetraniliprole (Tetrino Turf) Bayer	28	Ingestion		P		Registered for control of various soil pests, including Scarabs, Argentine Stem Weevil and Cutworm in turf.	L-M Bee:VH	R4
<p>Cotton / Melon Aphid (<i>Aphis gossypii</i>) Green Peach Aphid (<i>Myzus persicae</i>) Priority: Moderate</p> <p>Rated as a moderate priority. Aphids are sap-sucking pests that cause leaf distortion and stunting and will reduce overall plant vigour if present in large numbers. Aphids can also transmit Feathery Mottle Virus.</p>								
Afidopyropen (Versys) BASF	9D	Ingestion	7	A	ALL	Registered in sweet potato for control of Green Peach Aphid (<i>Myzus persicae</i>), Cabbage Aphid (<i>Brevicoryne brassicae</i>), Currant Lettuce Aphid (<i>Nasonovia ribis-nigr</i>), Cotton Aphid (<i>Aphis gossypii</i>) and suppression of Silverleaf Whitefly (<i>Bemisia tabaci</i>). Maximum of 4 applications per crop, with no more than 2 consecutive applications. Use a re-treatment interval of 14 days.	L Bee:L	R4
Dimethoate	1B	Contact	14	A	ALL	Registered in sweet potato for control of Aphids , Jassids, Mites, Leaf Hoppers, Green Vegetable Bug, Thrips and Wingless Grasshopper. Apply when pests appear. Maximum number of applications and re-treatment intervals not specified.	H Bee:H	R3

Pest / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Impact on beneficials	Regulatory Risk
Flupyradifurone (Sivanto Prime) Bayer	4D	Contact & Ingestion	7	A	ALL	Registered in sweet potato for control of Green Peach Aphid (<i>Myzus persicae</i>) and Silverleaf Whitefly (<i>Bemisia tabaci</i>). Maximum of 2 applications per year, with a minimum retreatment interval of 7 days.	L Bee:L	R4
Garlic + Chilli + Pyrethrins + Piperonyl Butoxide	3A	Contact	1	A	ALL	Registered in vegetables for control of Ants, Aphids , Caterpillars, Earwigs, Whitefly, Thrips and Leafhoppers. Suitable for organic growers. Apply as a cover spray and re-apply as necessary every 2-3 weeks.	VH Bee:H	R4
Phorate (Thimet)	1B	Contact	91 G:70	A	ALL	Registered in sweet potato for control of Aphids , Thrips, Jassids, Two-Spotted Mite and Wireworms. Distribute granules evenly in the furrow or band granules on each side of the row at planting time.	H Bee:H	R3
Pirimicarb (Pirimor)	1A	Contact	2	A	ALL	Registered in sweet potato for control of Green Peach Aphid (<i>Myzus persicae</i>), Melon Aphid (<i>Aphis gossypii</i>) and Cabbage Aphid. Do not apply more than 2 applications per season. Do not apply consecutive applications. Re-treatment interval not specified.	VL Bee:VL	R4
Potassium Salts of Fatty Acids (Natrasoap)	-	Contact	NR	A	ALL	Registered in vegetables for control of Aphids , Thrips, Mealybug, Two Spotted Mites, Spider Mite and Whitefly. Maximum number of applications not specified, re-treatment interval 5-7 days.	L Bee:L	R4
Spirotetramat (Movento) Bayer	23	Ingestion	7	A	ALL	Registered in sweet potato for control of Green Peach Aphid and Silverleaf Whitefly. Maximum of 3 applications per season, with a minimum re-treatment interval of 7 days.	M Bee:VL	R4
Sulfoxaflor (Transform) Corteva	4C	Contact & Ingestion	7	A	ALL	Registered in root & tuber vegetables for control of Green Peach Aphid , and for suppression of Tomato Potato Psyllid and Rutherglen Bug. Maximum number of applications not specified. Minimum re-treatment interval 7 days.	M Bee:VH	R4

Pest / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Impact on beneficials	Regulatory Risk
Cyantraniliprole (Benevia) FMC PER84805	28	Ingestion	14 NG	P-A	ALL (excl. VIC)	Permitted in sweet potato for control of Tomato Potato Psyllid. Registered for suppression of Green Peach Aphid in fruiting vegetables and potatoes, control of Melon Aphid in cucurbits, and control of Green Peach Aphid and Melon Aphid in strawberries.	L-M Bee:VH	R4
<i>Beauveria bassiana</i> (Velifer) BASF	UNF	Biological	NR	P		Registered for suppression of Green Peach Aphid in protected vegetables and ornamentals.	L Bee:L	R4
Dimpropridaz (Efficon) BASF	UN			P		Registered for control of Melon Aphid in cucurbits and cotton, and Green Peach Aphid in brassica vegetables and brassica leafy vegetables.	-	R4
Fonicamid (Mainman) UPL	29	Ingestion		P		Registered for control of Aphids in potatoes, cotton and cucurbits.	M Bee:VL	R4
Pymetrozine (Chess)	9B	Contact & Ingestion		P		Registered for control of Green Peach Aphid in brassica vegetables, tomato, eggplant, capsicum, lettuce, leafy vegetables, cucurbits, potatoes, stone fruit, almonds, pistachio, beetroot, cut flowers and nursery stock, control of Melon Aphid in leafy vegetables, cucurbits, cut flowers and nursery stock, and control of Aphids in celery.	L Bee:VL	R3
Two Spotted Mite (<i>Tetranychus urticae</i>)								
Priority: Moderate								
Rated as a moderate priority. Mites cause feeding damage to the leaves, reducing photosynthetic capacity and impacting on plant vigour. Outbreaks are favoured by hot, dry weather. Predatory mites provide effective natural control provided that they are not impacted by applications of disruptive chemistry.								
Dimethoate	1B	Contact	14	A	ALL	Registered in sweet potato for control of Aphids, Jassids, Mites , Leaf Hoppers, Green Vegetable Bug, Thrips and Wingless Grasshopper. Apply when pests appear. Maximum number of applications and re-treatment intervals not specified.	H Bee:H	R3

Pest / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Impact on beneficials	Regulatory Risk
Phorate (Thimet)	1B	Contact	91 G:70	A	ALL	Registered in sweet potato for control of Aphids, Thrips, Jassids, Two-Spotted Mite and Wireworms. Distribute granules evenly in the furrow or band granules on each side of the row at planting time.	H Bee:H	R3
Potassium Salts of Fatty Acids (Natrasoap)	-	Contact	NR	A	ALL	Registered in vegetables for control of Aphids, Thrips, Mealybug, Two Spotted Mites , Spider Mite and Whitefly. Maximum number of applications not specified, re-treatment interval 5-7 days.	L Bee:L	R4
Propargite (Omite)	12C	Contact	7	A	ALL	Registered in vegetables for control of Spider Mite and Two-Spotted Mites . Maximum number of applications and re-treatment interval not specified.	M Bee:L	R3
Sulphur	UN	Contact	NR	A	ALL	Registered in vegetables for control of Mites . Maximum number of applications not specified. Re-treatment interval 14-21 days.	L Bee:L	R4
Abamectin PER84249	6	Contact	14	P-A	ALL (excl. VIC)	Permitted in sweet potato for control of Tomato Potato Psyllid. Registered for control of Two Spotted Mite in apples, pears, cotton, hops, strawberries, ornamentals, soybeans, blackcurrants, blackberries & raspberries, cucurbits, spring onions, snow peas, sugar snap peas, sweet corn, fruiting vegetables, lettuce, papaya, custard apple, passionfruit and lychees.	M Bee:H	R3
Acequinocyl (Kanemite)	20B	Contact & Ingestion		P		Registered for control of Two Spotted Mite in pome fruit and stone fruit.	L Bee:L	R4
<i>Beauveria bassiana</i> (Velifer) BASF	UNF	Biological	NR	P		Registered for suppression of Two Spotted Mite in protected vegetables and ornamentals.	L Bee:L	R4
Cyflumetofen (Danisaraba) BASF	25A	Contact		P		Registered for control of Two Spotted Mite in pome fruit, almond, citrus, grape, strawberries, fruiting vegetables and ornamentals.	L Bee:L	R4

Pest / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Impact on beneficials	Regulatory Risk
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.	-	R4
Spiromesifen (Interrupt) Bayer	23	Ingestion		P		Registered for control of Two-Spotted Mite in pome fruit and stone fruit. US registration for control of Two Spotted Mite in tuberous & corm vegetables.	M Bee:VL	R4
Cluster Caterpillar (<i>Spodoptera litura</i>)								
Priority: Moderate								
Rated as a moderate priority. Larvae are voracious leaf feeders and large populations can develop quickly and cause significant damage to crops.								
<i>Bacillus thuringiensis subsp. kurstaki</i> (DiPel)	11A	Biological	NR	A	ALL	Registered in vegetables for control of caterpillars, including Spodoptera spp. Apply a minimum of 2 applications. Re-treatment interval 3-5 days.	VL Bee:L	R4
Emamectin (Proclaim Opti) Syngenta	6	Ingestion	3 NG	A	ALL	Registered in root & tuber vegetables for control of Diamondback Moth, Cabbage White Butterfly, Heliothis, Cluster Caterpillar and Loopers. Maximum of 4 applications per crop. Minimum re-treatment interval 7 days.	M Bee:H	R3
Flubendiamide (Belt) Bayer	28	Ingestion	1	A	ALL	Registered in root & tuber vegetables for control of Diamondback Moth, Cabbage White Butterfly, Cluster Caterpillar , Potato Moth and <i>Helicoverpa</i> spp. Maximum of 3 applications per crop. Re-treatment interval of 7-14 days.	L-M Bee:L	R4

Pest / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Impact on beneficials	Regulatory Risk
Garlic + Chilli + Pyrethrins + Piperonyl Butoxide	3A	Contact	1	A	ALL	Registered in vegetables for control of Ants, Aphids, Caterpillars , Earwigs, Whitefly, Thrips and Leafhoppers. Suitable for organic growers. Apply as a cover spray and re-apply as necessary every 2-3 weeks.	VH Bee:H	R4
Methomyl (Lannate) PER82428	1A	Contact	3	A	ALL	Permitted in sweet potato for control of <i>Helicoverpa</i> spp., Cucumber Moth, Cluster Caterpillar , Loopers, Webworm, Rutherglen Bug and Thrips (including Western Flower Thrips). Maximum of 3 applications per crop. Re-treatment interval 7 days.	H Bee:H	R2
Spinetoram (Success Neo) Corteva	5	Ingestion	3	P-A	ALL	Registered in sweet potato for control of Light Brown Apple Moth, Loopers, Helicoverpa, Potato Moth and Tomato Potato Psyllid.	M Bee:VH	R4
Spinosad (Entrust Organic) Corteva	5	Ingestion	3 G:14	P-A	ALL	Registered in root & tuber vegetables for control of Light Brown Apple Moth, Loopers, Helicoverpa and Potato Moth.	L Bee:H	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.	-	R4

Pest / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Impact on beneficials	Regulatory Risk
Fall Armyworm (<i>Spodoptera frugiperda</i>)								
Priority: Moderate								
Rated as a moderate priority. Fall Armyworm is an exotic pest that can reproduce prolifically, especially in warm weather. It is important to monitor crops for any incursions.								
Spinosad (Entrust Organic) Corteva PER89870	5	Ingestion	3 G:14	A	ALL (excl. VIC)	Permitted in root & tuber vegetables for control of Fall Armyworm . Maximum of 4 applications per crop. Re-treatment interval not specified.	L Bee:H	R4
<i>Spodoptera frugiperda</i> Multiple Nucleopolyhedrovirus (Fawligen) AgBiTech PER90820	31	Biological	NR	A	ALL	Permitted in root & tuber vegetables for control of Fall Armyworm . Maximum of 10 applications per crop. Minimum re-treatment interval 3 days.	VL Bee:VL	R4
<i>Spodoptera frugiperda</i> Multiple Nucleopolyhedrovirus (Spodovir Plus) PER91477	31	Biological	NR	A	ALL	Permitted in root & tuber vegetables for control of Fall Armyworm . Maximum of 10 applications per crop. Minimum re-treatment interval 3 days.	VL Bee:VL	R4
Spinetoram (Success Neo) Corteva	5	Ingestion	3	P-A	ALL	Registered in sweet potato for control of Light Brown Apple Moth, Loopers, Helicoverpa, Potato Moth and Tomato Potato Psyllid.	M Bee:VH	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.	-	R4

Pest / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Impact on beneficials	Regulatory Risk
Sweet Potato Weevil (<i>Cylas formicarius</i>) White Fringed Weevil (<i>Naupactus leucoloma</i>) Vegetable Weevil (<i>Listroderes difficilis</i>) Priority: Moderate								
Rated as a moderate priority. Sweet Potato Weevil larvae feed inside the storage roots, crown and in stems. Infested storage roots are riddled with spongy and discoloured cavities. Heavy infestation can cause vines to yellow and collapse. White Fringed Weevil larvae will also eat the storage roots, resulting in shallow, chewed holes.								
Bifenthrin (Talstar)	3A	Contact	NR	A	QLD, NSW, SA, WA & NT	Registered in sweet potato for control of Wireworm (<i>Heteroderes</i> spp.) and Sweet Potato Weevil (<i>Cylas formicarius</i>). Apply as a soil surface spray in front of a rotary hoe working at a depth of 30cm at 1-5 days prior to planting.	VH Bee:H	R3
Carbaryl (Bugmaster)	1A	Contact	3	A	ALL	Registered in sweet potato for control of Sweet Potato Weevil . Apply at first sign of pest activity and repeat as necessary. Maximum number of applications and re-treatment interval not specified.	H Bee:H	R4
Fipronil (Regent)	2B	Contact	NR	A	ALL	Registered in sweet potato for control of Wireworm, Mole Cricket and White Fringed Weevil . Apply as a broadcast spray to the soil surface and incorporate to a depth of 15cm prior to planting.	M Bee:VH	R2
Indoxacarb (Avatar eVo) FMC	22A	Ingestion		P		Registered for control of Vegetable Weevil in celery.	L Bee:H	R3
Tetraniliprole (Vayego) Bayer	28	Ingestion		P	ALL	Registered for control of Apple Weevil and Garden Weevil in pome fruit and stone fruit.	L-M Bee:VH	R4

Pest / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Impact on beneficials	Regulatory Risk
Symphylids (<i>Scutigerella immaculata</i>)								
Priority: Moderate								
Rated as a moderate priority. Symphylids are a soil-dwelling pest that can cause occasional problems with crop establishment. Damage to young, developing roots is best managed by ensuring vigorous, healthy crops at establishment.								
1,3-dichloropropene + Chloropicrin (Agrocelone)	8B	Soil Fumigant	NR	A	ALL	Registered in vegetables as a pre-plant soil fumigant for control of Plant Parasitic Nematodes, Symphylans , Wireworms, soil borne diseases (including <i>Fusarium</i> , <i>Verticillium</i> wilts, <i>Rhizoctonia</i> , & <i>Pythium</i>) and suppression of weeds. <i>For use by professional and registered fumigators only.</i>	-	R4
Bifenthrin (Talstar)	3A	Contact	NR	P-A	QLD, NSW, SA, WA & NT	Registered in sweet potato for control of Wireworm (<i>Heteroderes</i> spp.) and Sweet Potato Weevil (<i>Cylas formicarius</i>). Registered for control of Symphylids in pineapples and sugar cane.	VH Bee:H	R3
Fipronil (Regent)	2B	Contact	NR	P-A	ALL	Registered in sweet potato for control of Wireworm, Mole Cricket and White Fringed Weevil. Registered for control of Symphylids in ginger.	M Bee:VH	R2
Broflanilide (Vedira) BASF	30	Contact & Ingestion		P		Registered as an ant bait. It also has potential uses as a seed treatment for the control of Wireworms and other soil pests, and a foliar treatment for the control of chewing pests in various crops. Cimegra® (Broflanilide 100 g/L) has Canadian registration in corn and potatoes for the control of wireworms and corn rootworm applied as an in-furrow treatment at planting.	-	R4
Isocycloseram (Equento) Syngenta	30	Contact & Ingestion		P		Registered as seed treatment for control of various soil pests, including Bronze Field Beetle and Vegetable Beetle, in canola.	-	R4
Tetraniliprole (Tetrino Turf) Bayer	28	Ingestion		P		Registered for control of various soil pests, including Scarabs, Argentine Stem Weevil and Cutworm in turf.	L-M Bee:VH	R4

Pest / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Impact on beneficials	Regulatory Risk
Vegetable Leafhopper (<i>Austroasca viridigrisea</i>)								
Priority: Moderate								
Rated as a moderate priority. Sap-sucking pest that causes minor leaf speckling.								
Dimethoate	1B	Contact	14	A	ALL	Registered in sweet potato for control of Aphids, Jassids, Mites, Leaf Hoppers , Green Vegetable Bug, Thrips and Wingless Grasshopper. Apply when pests appear. Maximum number of applications and re-treatment intervals not specified.	H Bee:H	R3
Garlic + Chilli + Pyrethrins + Piperonyl Butoxide	3A	Contact	1	A	ALL	Registered in vegetables for control of Ants, Aphids, Caterpillars, Earwigs, Whitefly, Thrips and Leafhoppers . Suitable for organic growers. Apply as a cover spray and re-apply as necessary every 2-3 weeks.	VH Bee:H	R4
Phorate (Thimet)	1B	Contact	91 G:70	A	ALL	Registered in sweet potato for control of Aphids, Thrips, Jassids , Two-Spotted Mite and Wireworms. Distribute granules evenly in the furrow or band granules on each side of the row at planting time.	H Bee:H	R3
Flupyradifurone (Sivanto Prime) Bayer	4D	Contact & Ingestion	7	P-A	ALL	Registered in sweet potato for control of Green Peach Aphid (<i>Myzus persicae</i>) and Silverleaf Whitefly (<i>Bemisia tabaci</i>). US registration for control of Aphids, Leafhoppers and Whiteflies in sweet corn.	L Bee:L	R4
Sulfoxaflor (Transform) Corteva	4C	Contact & Ingestion	7	P-A	ALL	Registered in root and tuber vegetables for control of Green Peach Aphid, and suppression of Tomato Potato Psyllid and Rutherglen Bug. US registration for control of Leafhoppers in berries, pome fruit and root and tuber vegetables.	M Bee:VH	R4
Buprofezin (Applaud)	16	Contact & Ingestion		P		Registered for control of Leafhoppers in citrus.	M Bee:L	R4

Pest / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Impact on beneficials	Regulatory Risk
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. US registration for control of Leafhoppers in cucurbits, fruiting vegetables and leafy greens.	-	R4
<p>Potato Moth (<i>Phthorimaea operculella</i>) Cotton Bollworm (<i>Helicoverpa armigera</i>) Native Budworm (<i>Helicoverpa punctigera</i>) Light Brown Apple Moth (<i>Epiphyas postvittana</i>) Soybean Looper (<i>Thysanoplusia orichalcea</i>) Webworm (<i>Herpetogramma</i> spp.) Priority: Low</p> <p>Rated as a low priority. These caterpillar pests can cause minor leaf feeding damage, but rarely warrant economic control in sweet potato.</p>								
<i>Bacillus thuringiensis subsp. kurstaki</i> (DiPel)	11A	Biological	NR	A	ALL	Registered in vegetables for control of caterpillars, including Helicoverpa spp. and Soybean Looper . Apply a minimum of 2 applications. Re-treatment interval 3-5 days.	VL Bee:L	R4
Emamectin (Proclaim Opti) Syngenta	6	Ingestion	3 NG	A	ALL	Registered in root & tuber vegetables for control of Diamondback Moth, Cabbage White Butterfly, Heliothis , Cluster Caterpillar and Loopers . Maximum of 4 applications per crop. Minimum re-treatment interval 7 days.	M Bee:H	R3
Flubendiamide (Belt) Bayer	28	Ingestion	1	A	ALL	Registered in root & tuber vegetables for control of Diamondback Moth, Cabbage White Butterfly, Cluster Caterpillar, Potato Moth and Helicoverpa spp. Maximum of 3 applications per crop. Re-treatment interval of 7-14 days.	L-M Bee:L	R4

Pest / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Impact on beneficials	Regulatory Risk
Garlic + Chilli + Pyrethrins + Piperonyl Butoxide	3A	Contact	1	A	ALL	Registered in vegetables for control of Ants, Aphids, Caterpillars , Earwigs, Whitefly, Thrips and Leafhoppers. Suitable for organic growers. Apply as a cover spray and re-apply as necessary every 2-3 weeks.	VH Bee:H	R4
Methomyl (Lannate) PER82428	1A	Contact	3	A	ALL	Permitted in sweet potato for control of <i>Helicoverpa spp.</i> , Cucumber Moth, Cluster Caterpillar, Loopers, Webworm , Rutherglen Bug and Thrips (including Western Flower Thrips). Maximum of 3 applications per crop. Re-treatment interval 7 days.	H Bee:H	R2
Spinetoram (Success Neo) Corteva	5	Ingestion	3	A	ALL	Registered in sweet potato for control of Light Brown Apple Moth, Loopers, Helicoverpa , Potato Moth and Tomato Potato Psyllid. Maximum of 4 applications per crop. Re-treatment interval not specified.	M Bee:VH	R4
Spinosad (Entrust Organic) Corteva	5	Ingestion	3 G:14	A	ALL	Registered in root & tuber vegetables for control of Light Brown Apple Moth, Loopers, Helicoverpa and Potato Moth. Maximum of 4 applications per season. Re-treatment interval 7-14 days.	L Bee:H	R4
Chlorantraniliprole (Coragen) FMC	28	Ingestion		P		Registered for control of various lepidoptera in brassica vegetables, brassica leafy vegetables, stalk & stem vegetables, leafy vegetables, lettuce, fruiting vegetables, cucurbits, legume vegetables, potatoes, strawberries and sweet corn.	L Bee:VL	R4
Indoxacarb (Avatar eVo) FMC	22A	Ingestion		P		Registered for control of various lepidoptera in berries, brassica vegetables, celery, Chinese leafy vegetables, grapes, leafy vegetables, pome fruit, solanaceous fruit, stone fruit and sweet corn.	L Bee:H	R3

Pest / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Impact on beneficials	Regulatory Risk
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.	-	R4
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
Cutworms (<i>Agrostis</i> spp.)								
Priority: Low								
Rated as a low priority. Soil-dwelling pest that feeds on plant roots. Only a potential problem at establishment but rarely cause significant problems.								
Clothianidin + Imidacloprid (Poncho Plus) BASF	4A	Contact & Ingestion		P		Registered as a seed treatment for control of Cutworm in canola, forage brassicas, maize, sweet corn, sorghum, sunflower and pasture.	M Bee:M	R2
Tetraniliprole (Tetrino Turf) Bayer	28	Ingestion		P		Registered for control of various soil pests, including Scarabs, Argentine Stem Weevil and Cutworm in turf.	L-M Bee:VH	R4

Pest / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Impact on beneficials	Regulatory Risk
Black Field Cricket (<i>Teleogryllus commodus</i>) Mole Cricket (Gryllotalpidae) Priority: Low Rated as a low priority. Soil-dwelling pest that is not usually of significance. Will cause feeding damage to plant roots near the surface and can also damage irrigation by chewing on drop tape.								
Fipronil (Regent)	2B	Contact	NR	A	ALL	Registered in sweet potato for control of Wireworm, Mole Cricket and White Fringed Weevil. Apply as a broadcast spray to the soil surface and incorporate to a depth of 15cm prior to planting.	M Bee:VH	R2
Imidacloprid (Confidor)	4A	Contact & Ingestion	NR	P-A	ALL	Registered in sweet potato for control of Silverleaf Whitefly. Registered as a seed treatment for control of Field Cricket in maize, sorghum, sunflower and sweet corn.	M Bee:M	R2
Green Vegetable Bug (<i>Nezara viridula</i>) Rutherglen Bug (<i>Nysius vinitor</i>) Priority: Low Rated as a low priority. Green Vegetable Bug will damage young shoots by sap sucking. Rutherglen Bug cause minor feeding damage to leaves. Both are usually minor pests.								
Dimethoate	1B	Contact	14	A	ALL	Registered in sweet potato for control of Aphids, Jassids, Mites, Leaf Hoppers, Green Vegetable Bug , Thrips and Wingless Grasshopper. Apply when pests appear. Maximum number of applications and re-treatment intervals not specified.	H Bee:H	R3
Methomyl (Lannate) PER82428	1A	Contact	3	A	ALL	Permitted in sweet potato for control of <i>Helicoverpa</i> spp., Cucumber Moth, Cluster Caterpillar, Loopers, Webworm, Rutherglen Bug and Thrips (including Western Flower Thrips). Maximum of 3 applications per crop. Re-treatment interval 7 days.	H Bee:H	R2
Sulfoxaflor (Transform) Corteva	4C	Contact & Ingestion	7	A	ALL	Registered in root & tuber vegetables for control of Green Peach Aphid, and for suppression of Tomato Potato Psyllid and Rutherglen Bug . Maximum number of applications not specified. Minimum re-treatment interval 7 days.	M Bee:VH	R4

Pest / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Impact on beneficials	Regulatory Risk
Trichlorfon (Lepidex)	1B	Contact	2	A	ALL	Registered in vegetables for control of Cabbage White Butterfly, Cabbage Moth, Rutherglen Bug and Green Vegetable Bug . Maximum number of applications not specified. Re-treatment interval 7-10 days.	H Bee:H	R2
Fonicamid (Mainman) ISK	29	Ingestion		P		Registered for control of Aphids and Silverleaf Whitefly in cucurbits; Aphids in potatoes; Aphids and Mealybugs in apples and pears; and Aphids and Mirids in cotton. US registration for control of Plant Bugs in brassica vegetables, brassica leafy greens, cucurbits, fruiting vegetables, leaf petiole vegetables, leafy greens, tuberous and corm vegetables, pome fruit, stone fruit, tree nuts, grapes and other small vine climbing fruit (except fuzzy kiwifruit), low growing berries, rapeseed, sunflower, legume vegetables and pasture.	M Bee:L	R4
<p>Western Flower Thrips (<i>Frankliniella occidentalis</i>) Plague Thrips (<i>Thrips imaginis</i>) Tomato Thrips (<i>Frankliniella schultzei</i>) Onion Thrips (<i>Thrips tabaci</i>) Priority: Low</p> <p>Rated as a low priority. Can cause rasping damage to leaves through feeding action but are a minor pest of sweet potato.</p>								
Dimethoate	1B	Contact	14	A	ALL	Registered in sweet potato for control of Aphids, Jassids, Mites, Leaf Hoppers, Green Vegetable Bug, Thrips and Wingless Grasshopper. Apply when pests appear. Maximum number of applications and re-treatment intervals not specified.	H Bee:H	R3
Garlic + Chilli + Pyrethrins + Piperonyl Butoxide	3A	Contact	1	A	ALL	Registered in vegetables for control of Ants, Aphids, Caterpillars, Earwigs, Whitefly, Thrips and Leafhoppers. Suitable for organic growers. Apply as a cover spray and re-apply as necessary every 2-3 weeks.	VH Bee:H	R4

Pest / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Impact on beneficials	Regulatory Risk
Methomyl (Lannate) PER82428	1A	Contact	3	A	ALL	Permitted in sweet potato for control of <i>Helicoverpa</i> spp., Cucumber Moth, Cluster Caterpillar, Loopers, Webworm, Rutherglen Bug and Thrips (including Western Flower Thrips). Maximum of 3 applications per crop. Re-treatment interval 7 days.	H Bee:H	R2
Phorate (Thimet)	1B	Contact	91 G:70	A	ALL	Registered in sweet potato for control of Aphids, Thrips , Jassids, Two-Spotted Mite and Wireworms. Distribute granules evenly in the furrow or band granules on each side of the row at planting time.	H Bee:H	R3
Potassium Salts of Fatty Acids (Natrasoap)	-	Contact	NR	A	ALL	Registered in vegetables for control of Aphids, Thrips , Mealybug, Two Spotted Mites, Spider Mite and Whitefly. Maximum number of applications not specified, re-treatment interval 5-7 days.	L Bee:L	R4
Flupyradifurone (Sivanto Prime) Bayer	4D	Contact & Ingestion	7	P-A	ALL	Registered in sweet potato for control of Green Peach Aphid (<i>Myzus persicae</i>) and Silverleaf Whitefly (<i>Bemisia tabaci</i>). US registration for control of Thrips in bushberry, citrus, fruiting vegetables, low growing berries and tropical & subtropical fruit, inedible peel.	L Bee:L	R4
Spinetoram (Success Neo) Corteva	5	Ingestion	3	P-A	ALL	Registered in sweet potato for control of Light Brown Apple Moth, Loopers, Helicoverpa, Potato Moth and Tomato Potato Psyllid. Registered for control of Western Flower Thrips and other thrips in radish, swede, turnips, bulb vegetables, cucurbits, fruiting vegetables, leafy vegetables, legume vegetables, ornamentals and berryfruit.	M Bee:VH	R4
Spinosad (Entrust Organic) Corteva	5	Ingestion	3 G:14	P-A	ALL	Registered in root & tuber vegetables for control of Light Brown Apple Moth, Loopers, Helicoverpa and Potato Moth. Registered for control of Western Flower Thrips in brassica vegetables, fruiting vegetables, leafy vegetables, legume vegetables, ornamentals, berryfruit and pome fruit.	L Bee:H	R4

Pest / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Impact on beneficials	Regulatory Risk
Spirotetramat (Movento) Bayer	23	Ingestion	7	P-A	ALL	Registered in sweet potato for control of Green Peach Aphid and Silverleaf Whitefly. Registered for control of Western Flower Thrips and Tomato Thrips in green beans, Western Flower Thrips, Tomato Thrips and Plague Thrips in celery and rhubarb, herbs and bulb vegetables, Western Flower Thrips in eggplant, peppers and tomatoes and lettuce.	M Bee:VL	R4
<i>Beauveria bassiana</i> (Velifer) BASF	UN	Biological	NR	P		Registered for suppression of various pests including Western Flower Thrips, Onion Thrips , Greenhouse Whitefly, Silverleaf Whitefly, Sweet Potato Whitefly, Green Peach Aphid & Two-Spotted Spider Mites in protected vegetables and ornamentals.	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.	-	R4
Wingless Grasshopper (<i>Phaulacridium vittatum</i>)								
Priority: Low								
Rated as a low priority. Large numbers can cause feeding damage to leaves. A minor pest.								
Dimethoate	1B	Contact	14	A	ALL	Registered in sweet potato for control of Aphids, Jassids, Mites, Leaf Hoppers, Green Vegetable Bug, Thrips and Wingless Grasshopper . Apply when pests appear. Maximum number of applications and re-treatment intervals not specified.	H Bee:H	R3

Pest / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Impact on beneficials	Regulatory Risk
Fipronil (Regent)	2B	Contact	NR	P-A	ALL	Registered in sweet potato for control of Wireworm, Mole Cricket and White Fringed Weevil.	M Bee:VH	R2
Indoxacarb (Avatar eVo) FMC	22A	Ingestion		P		Registered for control of Wingless Grasshopper in pome fruit, stone fruit and grapes.	L Bee:H	R3
Tomato Potato Psyllid (<i>Bactericera cockerelli</i>)								
Priority: Low								
Rated as a low priority. Tomato Potato Psyllid has been detected in WA but is not yet found in other states. It has the potential to be a significant pest of sweet potato if its distribution widens to major growing regions. It feeds mostly on leaves and stems, resulting in poor vigour and reduced yield.								
Abamectin PER84249	6	Contact	14	A	ALL (excl. VIC)	Permitted in sweet potato for control of Tomato Potato Psyllid . Maximum of 5 foliar applications, with a retreatment interval of 7-14 days.	M Bee:H	R3
Bifenthrin (Talstar) PER84249	3A	Contact	NR	A	ALL (excl. VIC)	Permitted in sweet potato for control of Tomato Potato Psyllid . Apply as a foliar spray when pest first appears. Use a minimum retreatment interval of 14 days. Maximum number of applications not specified.	VH Bee:H	R3
Cyantraniliprole (Benevia) FMC PER84805	28	Ingestion	14 NG	A	ALL (excl. VIC)	Permitted in sweet potato for control of Tomato Potato Psyllid . Apply immediately upon discovery of the psyllid pest. Maximum of 2 applications per crop, with a retreatment interval of 7-10 days.	L-M Bee:VH	R4
Spinetoram (Success Neo) Corteva	5	Ingestion	3	A	ALL	Registered in sweet potato for control of Light Brown Apple Moth, Loopers, Helicoverpa, Potato Moth and Tomato Potato Psyllid . Maximum of 4 applications per crop. Re-treatment interval not specified.	M Bee:VH	R4
Spirotetramat (Movento) Bayer PER84245	23	Ingestion	7	A	ALL	Permitted in sweet potato for control of Tomato Potato Psyllid . Maximum of 3 applications per season, and no more than 2 consecutive applications. Use a minimum re-treatment interval of 7 days.	M Bee:VL	R4

Pest / Active Ingredient (Trade Name)	Chemical group	Activity	WHP, days	Availability	States	Comments	Impact on beneficials	Regulatory Risk
Sulfoxaflor (Transform) Corteva	4C	Contact & Ingestion	7	A	ALL	Registered in root & tuber vegetables for control of Green Peach Aphid, and for suppression of Tomato Potato Psyllid and Rutherglen Bug. Maximum number of applications not specified. Minimum re-treatment interval 7 days.	M Bee:VH	R4
Leafminers (<i>Liriomyza</i> spp.)								
Priority: Low								
Rated as a low priority. <i>Liriomyza</i> Leafminers feed on plant leaves in the larval stage. They are not a significant pest in sweet potato.								
Abamectin PER96481	6	Contact	14 NG	A	ALL	Permitted in root & tuber vegetables for suppression of Liriomyza Leafminers . Apply as a foliar spray when leafminers first appear. Maximum of 2 applications per crop, with a retreatment interval of 7-14 days.	M Bee:H	R3
Cyromazine (Diptex 150WP) PER81867	17	Contact	7 NG	A	ALL	Permitted in root and tuber vegetables for control of Liriomyza Leafminers . Apply as a foliar spray when leafminers first appear. Maximum of 6 applications per crop, with a re-treatment interval of 7 days.	L Bee:L	R4
Spinetoram (Success Neo) Corteva PER94451	5	Ingestion	3	A	ALL (excl. VIC)	Permitted in root and tuber vegetables, including sweet potato, for control of Liriomyza Leafminers . Apply as a foliar spray when leafminers first appear. Maximum of 4 applications per crop, with a re-treatment interval of 7-14 days.	M Bee:VH	R4
Spinosad (Entrust Organic) Corteva PER94331	5	Ingestion	3 G:14	A	ALL (excl. VIC)	Permitted in root and tuber vegetables for control of Liriomyza Leafminers . Apply as a foliar spray when leafminers first appear. Maximum of 4 applications per crop, with a minimum re-treatment interval of 5 days.	L Bee:L	R4

4.3 Weeds in sweet potato

4.3.1 Weed priorities

Common Name	Scientific Name
High	
Black Pigweed	<i>Trianthema portulacastrum</i>
Nut Grass	<i>Cyperus rotundus</i>
Moderate	
Blackberry Nightshade	<i>Solanum nigrum</i>
Volunteer Sweet Potato	<i>Ipomoea batatas</i>
Marshmallow	<i>Malva parviflora</i>
Low	
Flaxleaf Fleabane	<i>Conyza bonariensis</i>
Couch Grass	<i>Cynodon dactylon</i>
Fat Hen	<i>Chenopodium album</i>
Feather Top Rhodes Grass	<i>Chloris virgata</i>

Black Pigweed and Nut Grass were identified as the high priority weed in the feedback. An integrated weed management program should be used, incorporating pre-plant weed control and cultural measures such as farm hygiene and weed matting.

Resistance management

There are confirmed cases of resistance in Australia for Awnless Barnyard Grass (Group 9 at more than 200 sites), Feather Top Rhodes Grass (Group 9 at 4 sites) and Blackberry Nightshade (Group 22 at 2 sites).

Specific resistance management strategies for high resistance risk (1 and 2) and moderate resistance risk (0, 3, 4, 5, 9, 10, 12, 14, 15, 22, 27 and 34) herbicide modes of action are available on the CropLife Australia webpage⁶.

This report uses the new numerical herbicide mode of action classifications. Refer to the CropLife website⁷ to compare these to the previous alphabetical classifications.

⁶ <https://www.croplife.org.au/resources/programs/resistance-management/herbicide-resistance-management-strategies-2/>

⁷ https://www.croplife.org.au/wp-content/uploads/2021/07/A2-poster_03_FINAL.pdf

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
Black Pigweed (<i>Trianthema portulacastrum</i>)							
Priority: High							
Rated as a high priority. Aggressive summer-growing weed with a sprawling habit. Black Pigweed is difficult to control with herbicides.							
Glyphosate (Roundup)	9**	General Pre-Plant Weed Control	Registered as a pre-plant application in sweet potato for control of grass and broadleaf weeds.	NR	A	ALL	R3
Paraquat + Diquat (SpraySeed)	22**	General Pre-Plant Weed Control	Registered as a pre-plant application in sweet potato for control of annual grass and broadleaf weeds.	7	A	ALL	R1
S-Metolachlor (Dual Gold)	15**	Sweet Potatoes / Pre-emergence weed control	Registered in sweet potatoes for control of grass and broadleaf weeds, including Black Pigweed . Apply immediately after transplanting before weeds have germinated. Apply irrigation to wet soil through the root zone within 24 hours of application.	161 G:161	A	QLD, NSW, VIC, SA & NT	R4

Active Ingredient (Trade Name)	Chemical Group	Crop / Situation	Comment / Use / Weed	WHP (days)	Availability	States	Regulatory Risk
Terbutylazine (Terbyne)	3**		Registered for control of Black Pigweed in sorghum.		P		R4
Nut Grass (<i>Cyperus rotundus</i>)							
Priority: High							
Rated as a high priority. Prefers damp, water-logged soils but can survive for years underground during dry times. Herbicide options are limited and unreliable. Improve soil drainage if possible.							
Glyphosate (Roundup)	9**	General Pre-Plant Weed Control	Registered as a pre-plant application in sweet potato for control of grass and broadleaf weeds.	NR	A	ALL	R3
Norflurazon (Zoliar) AgNova	12**		Registered for control of Nut Grass in asparagus.		P		R4
Blackberry Nightshade (<i>Solanum nigrum</i>)							
Priority: Moderate							
Rated as a moderate priority. Prolific weed that is widely adapted and difficult to eradicate, mainly due to its long-term seed viability.							
Glyphosate (Roundup)	9**	General Pre-Plant Weed Control	Registered as a pre-plant application in sweet potato for control of grass and broadleaf weeds.	NR	A	ALL	R3
S-Metolachlor (Dual Gold)	15**	Sweet Potatoes / Pre-emergence weed control	Registered in sweet potatoes for control of grass and broadleaf weeds. Registered for control of Blackberry Nightshade in brassica vegetables, green beans, navy beans, maize, sweet corn, sorghum, sugar cane and tobacco.	161 G:161	P-A	QLD, NSW, VIC, SA & NT	R4
Aclonifen (Emerger) Bayer	H**	Pre-Emergence	Bayer is expected to seek registration for pre-emergent control of grass and broadleaf weeds in various vegetable crops. Registered in Europe for use in potatoes, legume vegetables and cereals. Blackberry Nightshade is listed as moderately susceptible at a high rate.		P		R4
Amitrole	34**		Registered for the control of grass and broadleaf weeds in orchards.		P		R4

Active Ingredient (Trade Name)	Chemical Group	Crop / Situation	Comment / Use / Weed	WHP (days)	Availability	States	Regulatory Risk
Dichlobenil (Casoran)	29**		Registered for residual weed control of annual grass and broadleaf weeds in orchards.		P		R4
Flumioxazin (Chateau)	14**		Registered for residual control of grass and broadleaf weeds, including Blackberry Nightshade , in grapevines, pome fruit, stone fruit, citrus, tree nuts, olives, avocados and blueberries.		P		R4
Isoxaben (Gallery) Corteva	29**		Registered for control of broadleaf weeds, including Blackberry Nightshade , in fruit and nut trees.		P		R4
Norflurazon (Zoliar) AgNova	12**		Registered for control of various grass and broadleaf weeds, including Blackberry Nightshade in citrus, grapes, almonds, pome fruit and stone fruit.		P		R4
Oryzalin	3**		Registered for control of various grass and broadleaf weeds, including Blackberry Nightshade , in bananas, grapes, pome fruit, stone fruit, citrus, nuts, non-bearing berryfruit and nursery stock.		P		R4
Oxyfluorfen (Goal)	14**		Registered for control of various grass and broadleaf weeds, including Blackberry Nightshade , in fruit and nut trees, vines, brassica vegetables, coffee, duboisia, pyrethrum, tobacco and tropical & subtropical fruit..		P		R4
Volunteer Sweet Potato (<i>Ipomoea batatas</i>)							
Priority: Moderate							
Rated as a moderate priority. Volunteers cannot be controlled by herbicides in crop. Key strategies are to control volunteers in fallow and use of mechanical controls in-crop.							
Glyphosate (Roundup)	9**	General Pre-Plant Weed Control	Registered as a pre-plant application in sweet potato for control of grass and broadleaf weeds.	NR	A	ALL	R3

Active Ingredient (Trade Name)	Chemical Group	Crop / Situation	Comment / Use / Weed	WHP (days)	Availability	States	Regulatory Risk
Marshmallow (<i>Malva parviflora</i>)							
Priority: Moderate							
Rated as a moderate priority. Adapted to a wide variety of environments and highly competitive weed. Control with knockdown herbicides can be unreliable.							
Glyphosate (Roundup)	9**	General Pre-Plant Weed Control	Registered as a pre-plant application in sweet potato for control of grass and broadleaf weeds.	NR	A	ALL	R3
Paraquat + Diquat (SpraySeed)	22**	General Pre-Plant Weed Control	Registered as a pre-plant application in sweet potato for control of annual grass and broadleaf weeds.	7	A	ALL	R1
Flumioxazin (Chateau)	14**		Registered for residual control of grass and broadleaf weeds, including Marshmallow , in grapevines, pome fruit, stone fruit, citrus, tree nuts, olives, avocados and blueberries.		P		R4
Isoxaben (Gallery) Corteva	29**		Registered for control of broadleaf weeds, including Small Flowered Mallow , in fruit and nut trees.		P		R4
Oxyfluorfen (Goal)	14**		Registered for control of various grass and broadleaf weeds, including Marshmallow , in fruit and nut trees, vines, brassica vegetables, coffee, duboisia, pyrethrum, tobacco and tropical & subtropical fruit..		P		R4
Flaxleaf Fleabane (<i>Conyza bonariensis</i>)							
Priority: Low							
Rated as a low priority in VIC and NSW. Flaxleaf Fleabane seeds prolifically and can germinate year-round. It is difficult to control with herbicides and a continuous program is required to manage it in cropping fields.							
Glyphosate (Roundup)	9**	General Pre-Plant Weed Control	Registered as a pre-plant application in sweet potato for control of grass and broadleaf weeds.	NR	A	ALL	R3
Paraquat + Diquat (SpraySeed)	22**	General Pre-Plant Weed Control	Registered as a pre-plant application in sweet potato for control of annual grass and broadleaf weeds.	7	A	ALL	R1

Active Ingredient (Trade Name)	Chemical Group	Crop / Situation	Comment / Use / Weed	WHP (days)	Availability	States	Regulatory Risk
Amitrole	34**		Registered for the control of grass and broadleaf weeds in orchards.		P		R4
Dichlobenil (Casoran)	29**		Registered for residual weed control of annual grass and broadleaf weeds in orchards.		P		R4
Flumioxazin (Chateau)	14**		Registered for residual control of grass and broadleaf weeds, including Fleabane , in grapevines, pome fruit, stone fruit, citrus, tree nuts, olives, avocados and blueberries.		P		R4
Couch Grass (<i>Cynodon dactylon</i>)							
Priority: Low							
Rated as a low priority. Couch Grass is an aggressive and highly competitive perennial grass that grows year-round in most areas. Herbicide control is effectively provided it is targeted to young, actively growing weeds. Multiple applications are usually required.							
Fluazifop-P (Fusilade) PER82556	1***	Sweet Potato / In-Crop Knockdown	Permitted in sweet potato for control of grass weeds, including Couch Grass (seedlings). Maximum of 1 application per crop.	70	A	ALL (excl. VIC)	R3
Glyphosate (Roundup)	9**	General Pre-Plant Weed Control	Registered as a pre-plant application in sweet potato for control of grass and broadleaf weeds.	NR	A	ALL	R3
Sethoxydim (Sertin)	1***	Sweet Potato / In-Crop Knockdown	Registered in sweet potato for control of grass weeds. Registered in ornamentals for control of Couch Grass .	NR	P-A	ALL (excl. VIC)	R4
Amitrole	34**		Registered for the control of grass and broadleaf weeds in orchards.		P		R4
Norflurazon (Zoliar) AgNova	12**		Registered for control of various grass and broadleaf weeds, including suppression of Couch Grass in citrus, grapes, almonds, pome fruit and stone fruit.		P		R4

Active Ingredient (Trade Name)	Chemical Group	Crop / Situation	Comment / Use / Weed	WHP (days)	Availability	States	Regulatory Risk
Fat Hen (<i>Chenopodium album</i>)							
Priority: Low							
Rated as a low priority. Fat Hen is a fast-growing woody annual weed, which can germinate throughout most of the year. Timely herbicide control is critical for managing this weed.							
Glyphosate (Roundup)	9**	General Pre-Plant Weed Control	Registered as a pre-plant application in sweet potato for control of grass and broadleaf weeds.	NR	A	ALL	R3
Paraquat + Diquat (SpraySeed)	22**	General Pre-Plant Weed Control	Registered as a pre-plant application in sweet potato for control of annual grass and broadleaf weeds.	7	A	ALL	R1
S-Metolachlor (Dual Gold)	15**	Sweet Potatoes / Pre-emergence weed control	Registered in sweet potatoes for control of grass and broadleaf weeds. Registered for control of Fat Hen in brassica vegetables, green beans and navy beans.	161 G:161	P-A	QLD, NSW, VIC, SA & NT	R4
Aclonifen (Emerger) Bayer	H**	Pre-Emergence	Bayer is expected to seek registration for pre-emergent control of grass and broadleaf weeds in various vegetable crops. Registered in Europe for use in potatoes, legume vegetables and cereals. Fat Hen is listed as susceptible.		P		R4
Amitrole	34**		Registered for the control of grass and broadleaf weeds in orchards.		P		R4
Dichlobenil (Casoran)	29**		Registered for residual weed control of annual grass and broadleaf weeds in orchards.		P		R4
Flumioxazin (Chateau)	14**		Registered for residual control of grass and broadleaf weeds, including Fat Hen , in grapevines, pome fruit, stone fruit, citrus, tree nuts, olives, avocados and blueberries.		P		R4
Isoxaben (Gallery) Corteva	29**		Registered for control of broadleaf weeds, including Fat Hen , in fruit and nut trees.		P		R4
Norflurazon (Zoliar) AgNova	12**		Registered for control of various grass and broadleaf weeds, including Fat Hen in citrus, grapes, almonds, pome fruit and stone fruit.		P		R4

Active Ingredient (Trade Name)	Chemical Group	Crop / Situation	Comment / Use / Weed	WHP (days)	Availability	States	Regulatory Risk
Oryzalin	3**		Registered for control of various grass and broadleaf weeds, including Fat Hen , in bananas, grapes, pome fruit, stone fruit, citrus, nuts, non-bearing berryfruit and nursery stock.		P		R4
Oxyfluorfen (Goal)	14**		Registered for control of various grass and broadleaf weeds, including Fat Hen , in fruit and nut trees, vines, brassica vegetables, coffee, duboisia, pyrethrum, tobacco and tropical & subtropical fruit..		P		R4
Feather Top Rhodes Grass (<i>Chloris virgata</i>)							
Priority: Low							
Rated as a low priority. Feathertop Rhodes Grass is an aggressive grass weed that is difficult to control with herbicides. Multiple applications are required.							
Glyphosate (Roundup)	9**	General Pre-Plant Weed Control	Registered as a pre-plant application in sweet potato for control of grass and broadleaf weeds.	NR	A	ALL	R3
Paraquat + Diquat (SpraySeed)	22**	General Pre-Plant Weed Control	Registered as a pre-plant application in sweet potato for control of annual grass and broadleaf weeds.	7	A	ALL	R1
Dichlobenil (Casoran)	29**		Registered for residual weed control of annual grass and broadleaf weeds in orchards.		P		R4

5. References

5.1 Information:

AgChem Access Priority Access Forum	https://www.agrifutures.com.au/national-rural-issues/agvet-chemicals/
Australian Pesticide and Veterinary Medicines Authority	www.apvma.gov.au
APVMA Chemical review	https://apvma.gov.au/chemicals-and-products/chemical-review/listing
APVMA MRLs	https://www.legislation.gov.au/Details/F2022C00400
APVMA Permit search	https://productsearch.apvma.gov.au/permits
APVMA Product search	https://productsearch.apvma.gov.au/products
Codex MRL database	http://www.fao.org/fao-who-codexalimentarius/codex-texts/dbs/pestres/en/
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/
Growcom – Infopest Database	www.infopest.com.au
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, nematicides, 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 sweet potato

Appendix 2. Products available for control of insects and mites in sweet potato

Appendix 3. Products available for weed control in sweet potato

Appendix 4. Current permits for use in sweet potato

Appendix 5. Sweet potato Maximum Residue Limits (MRLs)

Appendix 6. Sweet potato Agrichemical Regulatory Risk Assessment

Appendix 1. Products available for disease control in sweet potato

Active Ingredient (Trade Name)	Chem. group	Situation	Diseases / Comments	States	WHP Days	Regulatory risk
1,3-dichloropropene + Chloropicrin (Agrocelone)	8B	Vegetables / Soil fumigant	Plant parasitic nematodes, symphylans, wireworms, soil borne diseases (including <i>Fusarium</i> , <i>Verticillium</i> wilts, <i>Rhizoctonia</i> , & <i>Pythium</i>) and suppression of weeds. <i>For use by professional and registered fumigators only.</i>	ALL	NR	R4
Boscalid (Filan) BASF	7	Root & Tuber Vegetables	Sclerotinia Rot (<i>Sclerotinia minor</i> , <i>S.sclerotiorum</i>)	ALL	7	R4
Bromo Chloro Dimethyl Hydantoin (BCDMH)	-	Sanitiser / Post-Harvest Treatment	External Rot Causing Organisms	ALL	NR	R4
Chlorine	-	Sanitiser / Post-Harvest Treatment	Bacteria & Fungi	ALL	NR	R4
Copper	M1	Vegetables	Rust & Leaf Spot Diseases	ALL	1	R4
Dazomet (Basamid)	8F	General soil fumigant	Pre-plant fumigant in seed beds for control of soil fungi including <i>Pythium</i> , <i>Phytophthora</i> , <i>Sclerotinia</i> , <i>Sclerotium</i> , <i>Rhizoctonia</i> , <i>Verticillium</i> , <i>Plasmodiophora</i> , <i>Armillaria</i> and <i>Fusarium</i> spp. Nematodes, plus insects, weeds & soil fungi	ALL	NR	R4
Iodine	-	Root crops	Post-Harvest Sanitiser – Bacteria and Fungi	ALL	NR	R4
Metham Sodium	-	Food Crops / Pre-Plant Fumigant	Fungal diseases including <i>Rhizoctonia</i> , <i>Pythium</i> , <i>Fusarium</i> , <i>Phytophthora</i> , <i>Verticillium</i> , <i>Sclerotinia</i> and Club Root of crucifers & Nematodes	ALL	NR	R4

Active Ingredient (Trade Name)	Chem. group	Situation	Diseases / Comments	States	WHP Days	Regulatory risk
Penthiopyrad (Fontelis) Corteva	7	Root & Tuber Vegetables, including Sweet Potato	Early Blight / Target Spot (<i>Alternaria</i> spp.) Powdery Mildew (<i>Erysiphe</i> spp.)	ALL	7 NG	R4
Peroxyacetic Acid	M	Sanitiser / Post-Harvest Treatment	Bacteria	ALL	NR	R4
Pydiflumetofen + Difenoconazole (Miravis Duo) Syngenta	7+3	Root & Tuber Vegetables, including Sweet Potato	Early Blight / Target Spot (<i>Alternaria</i> spp.) Powdery Mildew (<i>Erysiphe</i> spp., <i>Oidium</i> spp.) Cercospora Leaf Spot (<i>Cercospora</i> spp.)	ALL	1 NG	R3
<i>Streptomyces lydicus</i> WYEC108 (Actinovate) Novozymes Bioag	BM 02	Vegetables	As a seed treatment for <i>Fusarium</i> , <i>Rhizoctonia</i> & <i>Pythium</i> Management	ALL	NR	R4
Sulphur	M2	Vegetables	Powdery Mildew and Rust	ALL	NR	R4
Thiabendazole (Tecto) Syngenta	1	Sweet Potato Seed Roots	Scurf (<i>Monilochaetes infuscans</i>) Root Rot (<i>Fusarium</i> spp.)	ALL	NR	R4
Thiabendazole (Tecto) Syngenta PER12047	1	Sweet Potato	Scurf Fusarium Root Rot	ALL (excl. VIC)	NR	R4

Appendix 2. Products available for control of insects and mites in sweet potato

Active Ingredient (Trade Name)	Chem. group	Situation	Pests / Comments	States	WHP Days	Regulatory risk
1,3-dichloropropene + Chloropicrin (Agrocelone)	8B	Vegetables / Soil fumigant	Plant parasitic nematodes, symphylans, wireworms, soil borne diseases and suppression of weeds. <i>For use by professional and registered fumigators only.</i>	ALL	NR	R4
4-(P-Acetoxyphenyl)-2-Butanone + Malathion	1B	Fruit Fly Trap	Queensland Fruit Fly	ALL	NR	R3
4-(P-Acetoxyphenyl) -2-Butanone + Fipronil	2B	Fruit Fly Trap	Queensland Fruit Fly (<i>Bactrocera tryoni</i>) Lesser Queensland Fruit Fly (<i>Bactrocera neohumeralis</i>)	ALL	NR	R2
Abamectin (Tervigo) Syngenta	6	Sweet Potato	Root Knot Nematode	ALL	NR	R3
Abamectin PER84249	6	Sweet Potato	Tomato Potato Psyllid	ALL (excl. VIC)	14	R3
Abamectin PER96481	6	Root & Tuber vegetables	Suppression of Leafminers (<i>Liriomyza</i> spp.), including: Vegetable Leafminer (<i>Liriomyza sativae</i>) Serpentine Leafminer (<i>Liriomyza huidobrensis</i>)	ALL	14 NG	R3
Afidopyropen (Versys) BASF	9D	Sweet Potato	Green Peach Aphid (<i>Myzus persicae</i>) Cabbage Aphid (<i>Brevicoryne brassicae</i>) Currant Lettuce Aphid (<i>Nasonovia ribis-nigri</i>) Cotton Aphid (<i>Aphis gossypii</i>) Suppression of Silverleaf Whitefly (<i>Bemisia tabaci</i>)	ALL	7	R4
<i>Bacillus thuringiensis subsp. kurstaki</i> (DiPel)	11A	Vegetables	Lepidoptera	ALL	NR	R4
Bifenthrin (Talstar)	3A	Sweet Potato	Wireworm (<i>Heteroderes</i> spp.) Sweet Potato Weevil (<i>Cylas formicarius</i>)	QLD, NSW, SA, WA & NT	NR	R3

Active Ingredient (Trade Name)	Chem. group	Situation	Pests / Comments	States	WHP Days	Regulatory risk
Bifenthrin (Talstar) PER84249	3A	Sweet Potato	Tomato Potato Psyllid	ALL (excl. VIC)	NR	R3
Carbaryl (Bugmaster)	1A	Sweet Potato	Sweet Potato Weevil	ALL	3	R4
Cyantraniliprole (Benevia) FMC PER84805	28	Sweet Potato	Tomato Potato Psyllid (<i>Bactericera cockerelli</i>)	ALL (excl. VIC)	14 NG	R4
Cyromazine (Diptex 150WP) PER81867	17	Root and Tuber vegetables	Lyriomyza Leafminers	ALL	7 NG	R4
Dimethoate	1B	Sweet Potato	Aphids, Jassids, Mites, Leaf Hoppers, Green Vegetable Bug, Thrips, Wingless Grasshopper	ALL	14	R3
Emamectin (Proclaim Opti) Syngenta	6	Root and Tuber Vegetables, including Sweet Potato	Diamondback Moth (<i>Plutella xylostella</i>) Cabbage White Butterfly (<i>Pieris rapae</i>) Heliothis (<i>Helicoverpa</i> spp.) Cluster Caterpillar (<i>Spodoptera litura</i>) Loopers (<i>Chrysodeixis</i> spp.) Cabbage Centre Grub (<i>Hellula hydralis</i>)	ALL	3 NG	R3
Ethyl Formate	-	Kumera / Post-Harvest Fumigant	Detritus Moth (<i>Opogona omoscopa</i>)	ALL	NR	R4
Fipronil (Regent)	2B	Sweet Potato	Wireworm Mole Cricket White Fringed Weevil (<i>Naupactus leucoloma</i>)	ALL	NR	R2
Fluazaindolizine (Salibro ReKlemel) Corteva	N-UN	Sweet Potato	Root Knot Nematode (<i>Meloidogyne</i> spp.)	ALL	NR	R4

Active Ingredient (Trade Name)	Chem. group	Situation	Pests / Comments	States	WHP Days	Regulatory risk
Flubendiamide (Belt) Bayer	28	Root & Tuber Vegetables, including Sweet Potato	Diamondback Moth (<i>Plutella xylostella</i>) Cabbage White Butterfly (<i>Pieris rapae</i>) Cluster Caterpillar (<i>Spodoptera litura</i>) Potato Moth (<i>Phthorimaea operculella</i>) Heliothis (<i>Helicoverpa</i> spp.)	ALL	1	R4
Fluensulfone (Nimitz) Adama	-	Sweet Potato	Root Knot Nematode (<i>Meloidogyne</i> spp.)	ALL	NR	R4
Fluopyram (Velum Prime) Bayer	N-3	Root & Tuber Vegetables	Root Knot Nematode (<i>Meloidogyne</i> spp.) Root Lesion Nematode (<i>Pratylenchus</i> spp.)	ALL	NR	R4
Flupyradifurone (Sivanto Prime) Bayer	4D	Sweet Potato	Green Peach Aphid (<i>Myzus persicae</i>) Silverleaf Whitefly (<i>Bemisia tabaci</i>)	ALL	7	R4
Garlic + Chilli + Pyrethrins + Piperonyl Butoxide	3A	Vegetables	Ants, Aphids, Caterpillars, Earwigs, Whitefly, Thrips and Leafhoppers. Suitable for organic growers.	ALL	1	R4
Imidacloprid (Confidor)	4A	Sweet Potato / Soil & Foliar Application	Silverleaf Whitefly	ALL	NR	R2
Iron EDTA Complex	-	All plants	Snails & Slugs	ALL	NR	R4
Metaldehyde	-	Vegetables	Snails & Slugs	ALL	7	R4
Metaldehyde + Fipronil (Transcend) Intrade	2B	Sweet Potato	European Earwigs Portugese Millipedes Slaters Snails & Slugs	ALL	NR NG	R2
Metham Sodium	-	Soil Fumigant	Nematodes, weed seeds, and various fungal diseases	ALL	NR	R4
Methiocarb (MesuroI)	1A	Vegetables	Snails & Slugs	ALL	NR	R2

Active Ingredient (Trade Name)	Chem. group	Situation	Pests / Comments	States	WHP Days	Regulatory risk
Methomyl (Lannate) PER82428	1A	Sweet Potato	<i>Helicoverpa</i> spp. Cucumber Moth Cluster Caterpillar Loopers Webworm Rutherglen Bug Thrips (including Western Flower Thrips)	ALL	3	R2
Oxamyl (Vydate) Corteva	1A	Sweet Potato	Root Knot Nematode (<i>Meloidogyne</i> spp.)	ALL (excl. TAS)	NR	R4
Phorate (Thimet)	1B	Sweet Potato	Aphids Thrips Jassids Two-Spotted Mite Wireworms	ALL	91 G:70	R3
Pirimicarb (Pirimor)	1A	Sweet Potato	Green Peach Aphid (<i>Myzus persicae</i>) Melon Aphid (<i>Aphis gossypii</i>) Cabbage Aphid	ALL	2	R4
Potassium Salts of Fatty Acids (Natrasoap)	-	Vegetables	Aphids Thrips Mealybug Two Spotted Mites Spider Mite Whitefly	ALL	NR	R4
Propargite (Omite)	12C	Vegetables	Two-Spotted Mites & Spider Mites.	ALL	7	R3
Pyriproxyfen (Admiral) Sumitomo	7C	Sweet Potato	Silverleaf Whitefly (<i>Bemisia tabaci</i>)	ALL	7	R4
Pyriproxyfen + Piperonyl Butoxide (Patriarch RMR) Imtrade	7C	Sweet Potato	Silverleaf Whitefly (<i>Bemisia tabaci</i>)	ALL	7	R4

Active Ingredient (Trade Name)	Chem. group	Situation	Pests / Comments	States	WHP Days	Regulatory risk
Pyriproxyfen (Distance Ant Bait) Sumitomo	7C	Cropping Areas	Invasive & Nuisance Ants	ALL	NR	R4
Spinetoram (Success Neo) Corteva	5	Root & Tuber Vegetables, including Sweet Potato	Light Brown Apple Moth Loopers Helicoverpa Potato Moth Tomato Potato Psyllid (<i>Bactericera cockerelli</i>)	ALL	3	R4
Spinetoram (Success Neo) Corteva PER94451	5	Root & Tuber Vegetables, including Sweet Potato	Liriomyza Leafminers including: Vegetable Leaf Miner (<i>Liriomyza sativae</i>) Pea Leaf Miner / Serpentine Leaf Miner (<i>Liriomyza huidobrensis</i>) American Serpentine Leaf Miner (<i>Liriomyza trifolii</i>)	ALL (excl. VIC)	3	R4
Spinosad (Entrust Organic) Corteva	5	Root & Tuber Vegetables, including Sweet Potato	Light Brown Apple Moth Loopers Helicoverpa Potato Moth	ALL	3 G:14	R4
Spinosad (Entrust Organic) Corteva PER89870	5	Root & Tuber Vegetables	Fall Armyworm (<i>Spodoptera frugiperda</i>)	ALL (excl. VIC)	3 G:14	R4
Spinosad (Entrust Organic) Corteva PER94331	5	Root & Tuber Vegetables, including Sweet Potato	Liriomyza Leafminers including: Vegetable Leaf Miner (<i>Liriomyza sativae</i>) Pea Leaf Miner / Serpentine Leaf Miner (<i>Liriomyza huidobrensis</i>) American Serpentine Leaf Miner (<i>Liriomyza trifolii</i>)	ALL (excl. VIC)	3 G:14	R4
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

Active Ingredient (Trade Name)	Chem. group	Situation	Pests / Comments	States	WHP Days	Regulatory risk
Spirotetramat (Movento) Bayer	23	Sweet Potato	Green Peach Aphid (<i>Myzus persicae</i>) Silverleaf Whitefly (<i>Bemisia tabaci</i>)	ALL	7	R4
Spirotetramat (Movento) Bayer PER84245	23	Sweet Potato	Tomato Potato Psyllid	ALL	7	R4
<i>Spodoptera frugiperda</i> Multiple Nucleopolyhedrovirus (Fawligen) AgBiTech PER90820	31	Root & Tuber Vegetables	Fall Armyworm	ALL	NR	R4
<i>Spodoptera frugiperda</i> Multiple Nucleopolyhedrovirus (Spodovir Plus) AgBiTech PER91477	31	Root & Tuber Vegetables	Fall Armyworm	ALL	NR	R4
Sulfoxaflor (Transform) Corteva	4C	Root & Tuber Vegetables	Green Peach Aphid Suppression of: Tomato Potato Psyllid Rutherglen Bug	ALL	7	R4
Sulphur	UN	Vegetables	Mites	ALL	NR	R4
Trichlorfon (Lepidex)	1B	Vegetables	Cabbage White Butterfly Cabbage Moth Green Vegetable Bug Rutherglen Bug	ALL	2	R2

Appendix 3. Products available for weed control in sweet potato

Active ingredient (Trade Name)	Chem. Group	Situation	Comment / Use / Weed	WHP (days)	States	Regulatory risk
1,3-dichloropropene + Chloropicrin (Telone C-35)	8B	Vegetables / Soil fumigant	plant parasitic nematodes, symphylans, wireworms, soil borne diseases and suppression of weeds. <i>For use by professional and registered fumigators only.</i>	NR	ALL	R4
Diquat (Reglone)	22**	Sweet Potato	Pre-harvest crop desiccation	14	ALL	R1
Fluazifop-P (Fusilade) PER82556	1***	Sweet Potato	Grass Weeds	70	ALL (excl. VIC)	R3
Glyphosate (Roundup)	9**	General Pre-Crop Spray	Grass and Broadleaf Weeds	NR	ALL	R3
Paraquat + Diquat (SpraySeed)	22***	General Pre-Crop Spray	Grass and Broadleaf Weeds	7	ALL	R1
S-Metolachlor (Dual Gold)	15**	Sweet Potato	Annual Grass and Broadleaf Weeds	161 G:161	QLD, NSW, VIC, SA & NT	R4
Sethoxydim (Sertin)	1***	Sweet Potato	Grass Weeds	NR	ALL (excl. VIC)	R4

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

Appendix 4. Current permits for use in sweet potato

Permit No.	Description	Issued Date	Expiry Date	Permit Holder
PER94331	Spinosad / Sweet Potato / Liriomyza Leaf Miners	29-Apr-24	30-Apr-26	Hort Innovation
PER12047 Version 4	Thiabendazole (Tecto) / Sweet Potato / Scurf, Fusarium Root Rot	29-Jun-11	30-Sep-26	Hort Innovation
PER84249 Version 3	Abamectin, Bifenthrin / Sweet Potato / Tomato Potato Psyllid	16-Jun-17	30-Sep-26	NSW DPI
PER81867 Version 3	Cyromazine (Diptex 150WP) / Root & Tuber Vegetables / Liriomyza Leafminers	02-Dec-19	30-Sep-26	Hort Innovation
PER13151 Version 4	Zinc Phosphide / Sweet Potato / Mice & Rats	14-Dec-11	31-Mar-27	Hort Innovation
PER91477 Version 4	Spodoptera frugiperda NPV (Spodovir Plus) / Root & Tuber Vegetables / Fall Armyworm	03-Nov-21	31-Mar-27	Andermatt Group Ag
PER90820 Version 4	Spodoptera frugiperda NPV (Fawligen) / Root & Tuber Vegetables / Fall Armyworm	30-Mar-21	31-Mar-27	AgBiTech
PER94451	Spinetoram (Success Neo) / Sweet Potato / Liriomyza Leaf Miners	05-Jul-24	31-Jul-27	Hort Innovation
PER82556 Version 2	Fluazifop-P (Fusilade) / Sweet Potato / Grass Weeds	16-Apr-14	30-Nov-27	Hort Innovation
PER84805 Version 2	Cyantraniliprole (Benevia) / Sweet Potato / Tomato Potato Psyllid	06-Dec-17	31-Dec-27	Hort Innovation
PER96481	Abamectin / Root & Tuber Vegetables / Liriomyza Leaf Miners	08-Aug-25	31-Jul-28	Hort Innovation
PER82428 Version 5	Methomyl (Lannate) / Sweet Potato / Fall Armyworm / Various Insect Pests	22-Apr-16	31-Jan-29	Hort Innovation
PER84245 Version 3	Spirotetramat (Movento) / Sweet Potato / Tomato Potato Psyllid	07-Apr-17	31-Dec-29	NSW DPI
PER89870 Version 3	Spinosad (Entrust Organic) / Root & Tuber Vegetables / Fall Armyworm	21-Jul-20	31-Oct-30	Hort Innovation

Appendix 5. Sweet Potato Maximum Residue Limits (MRLs)

CODEX commodity groupings of root and tuber vegetables:

VR 0075	Root and Tuber Vegetables
VR 2070	Root Vegetables
VR 2071	Tuberous and Corm Vegetables
VR 0508	Sweet Potato Vegetables

Note: Export volumes of Australian sweet potato are small, accounting for approximately one percent of total production. The largest export destination is the United Arab Emirates (40%), with smaller volumes going to Singapore, Malaysia, Qatar and Hong Kong. Available information indicates that in the absence specific limits in legislation that most countries defer to Codex, followed by EU MRL standards or apply a 0.01 ppm 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		Vegetables	*0.1	-
Abamectin	VR 0075	Root & Tuber Vegetables	*0.01	-
	VR 0508	Sweet Potato	-	*0.005
Afidopyropen	VR 0508	Sweet Potato	*0.01	-
	VR 2071	Tuberous & Corm Vegetables	-	*0.01
Aldicarb	VR 0508	Sweet Potato	-	0.1
Aldrin & Dieldrin	VR 0075	Root & Tuber Vegetables	E0.1	E0.1
Azoxystrobin	VR 0075	Root & Tuber Vegetables {except potato & sugar beet}	-	1
Bifenthrin	VR 0508	Sweet Potato	*0.05	-
	VR 0075	Root & Tuber Vegetables	-	0.05
Bixafen	VR 0075	Root & Tuber Vegetables		0.06
Boscalid	VR 0075	Root & Tuber Vegetables	1	2
Broflanilide	VR 2071	Tuberous & Corm Vegetables		0.04
Carbaryl	VR 0508	Sweet Potato	0.1	*0.02
Chlorantraniliprole	VR 0075	Root & Tuber Vegetables {except potato}	T0.5	-
	VR 0075	Root & Tuber Vegetables {except carrot & radish}	-	0.02
Chlordane		Vegetables { except Fruiting vegetables, cucurbits; Sugar beet}	E0.02	
Chlorothalonil		Vegetables {except Asparagus; Brussels sprouts; Carrot; Celery; Fennel, bulb; Fruiting vegetables, cucurbits; Galangal, greater; Galangal, lesser; Garlic; Peas; Leafy vegetables; Leek; Onion, bulb; Potato; Pulses; Spring onion; Tomato}	T7	-
	VR 0075	Root & Tuber Vegetables {except horseradish}	-	0.3
Chlorpyrifos	VR 0508	Sweet Potato	T0.05	-
				-
Chlorthal-Dimethyl				-
Clothianidin	VR 0075	Root & Tuber Vegetables	-	0.2
Cyantraniliprole	VR 0508	Sweet Potato	T0.05	-
	VR 0075	Root & Tuber Vegetables {except potato}	-	0.05
Cyclaniliprole	VR 2071	Tuberous & Corm Vegetables	-	*0.01
Cyhalothrin	VR 0075	Root & Tuber Vegetables	-	*0.01
Cypermethrins	VR 0075	Root & Tuber Vegetables {except sugar beet}	-	*0.01
Cyromazine	VR 0075	Root & Tuber Vegetables	T1	-
DDT		Vegetables	E1	
Diafenthuron		Vegetables	0.7	

Chemical	Codex	Description	APVMA MRL mg/kg	Codex MRL mg/kg
Diazinon		Vegetables	0.7	-
Dicofol		Vegetables {except Cucumber; Gherkin; Tomato}	5	-
Difenoconazole	VR 0075	Root & Tuber Vegetables {except celeriac}	0.5	-
	VR 0508	Sweet Potato		Po4
Dimethenamid-P	VR 0508	Sweet Potato	-	*0.01
Dimethoate	VR 0508	Sweet Potato	0.1	-
Diquat		Vegetables {except Beans; Broad bean; Lupin (dry); Onion, bulb; Peas; Potato; Soya bean (dry); Sugar beet}	*0.05	-
Emamectin	VR 0075	Root & Tuber Vegetables {except potato}	*0.01	-
Endosulfan	VR 0508	Sweet Potato	-	*0.05
EPTC		Vegetables	*0.04	-
Ethoprophos	VR 0508	Sweet Potato	-	0.05
Fipronil	VR 0508	Sweet Potato	*0.01	-
Fluazaindolizine	VR 0075	Root & Tuber Vegetables	0.3	-
	VR 2070	Root Vegetables {except carrot}		0.04
	VR 2071	Tuberous & Corm Vegetables		0.2
Fluazifop-P-butyl	VR 0075	Root & Tuber Vegetables {except Potato; Sweet potato; Taro; Yam bean; Yams}	1	
	VR 0508	Sweet Potato	T0.3	-
Flubendiamide	VR 0075	Root & Tuber Vegetables {except potato}	0.2	-
Fludioxonil	VR 0508	Sweet Potato	-	Po10
Fluensulfone	VR 0075	Root & Tuber Vegetables	2	-
	VR 0075	Root & Tuber Vegetables {not specified elsewhere}	-	3
	VR 0508	Sweet Potato	-	0.8
Flumioxazin	VR 0508	Sweet Potato	-	*0.02
Fluopyram	VR 0508	Sweet Potato	0.02	
Flupyradifurone	VR 0508	Sweet Potato	0.07	0.05
	VR 0075	Root & Tuber Vegetables {except potato}	-	0.7
Fluxapyroxad	VR 2071	Tuberous & Corm Vegetables {except potato}	-	0.03
Glyphosate	VR 0075	Root & Tuber Vegetables	*0.1	-
Heptachlor		Vegetables {except Carrot; Soya bean (dry); Tomato}	E0.05	-
Imidacloprid	VR 0508	Sweet Potato	0.3	-
	VR 0075	Root & Tuber Vegetables	-	0.5
Inorganic Bromide		Vegetables {except Peppers, sweet [capsicum]}	20	-
Lindane		Vegetables	E2	-
Linuron		Vegetables {except Carrot, Celeriac; Celery; Leek; Parsnip}	*0.05	-
Mefentrifluconazole	VR 2071	Tuberous & Corm Vegetables		0.05
	VR 2070	Root Vegetables {except sugar beet}		0.5
Metalaxyl		Vegetables {except Asparagus; Beetroot; Bulb vegetables [alliums]; Fruiting vegetables, cucurbits; Leafy vegetables; Peppers; Podded pea (young pods) [snow and sugar snap peas]; Tomato}	T0.1	-
Metaldehyde		Vegetables	1	-
Metconazole	VR 2071	Tuberous & Corm Vegetables	-	*0.04
Methiocarb				-
Methomyl	VR 0075	Root & Tuber Vegetables	1	-
Methoxyfenozide	VR 0508	Sweet Potato	-	0.02
Methyl Bromide		Vegetables {except Cucumber; Peppers}	T*0.05	-
Metolachlor	VR 0508	Sweet Potato	*0.2	-

Chemical	Codex	Description	APVMA MRL mg/kg	Codex MRL mg/kg
Metrafenone				-
Myclobutanil	VR 0075	Root & Tuber Vegetables	-	0.06
Omethoate	VR 0508	Sweet Potato	0.05	-
Oxamyl	VR 0508	Sweet Potato	0.2	-
Oxathiapiprolin	VR 2071	Tuberous & Corm Vegetables	-	0.04
Paraquat		Vegetables {except Potato, Pulses}	*0.05	0.05
Pendimethalin	VR 0075	Root & Tuber Vegetables {except carrot}	*0.05	-
Penthiopyrad	VR 0075	Root & Tuber Vegetables {except potato}	2	-
Phorate	VR 0508	Sweet Potato	0.5	-
Phosphine	VR 0075	Root & Tuber Vegetables	T*0.01	-
Phosphorous Acid	VR 0075	Root & Tuber Vegetables {except potato}	T100	-
Piperonyl Butoxide		Vegetables	8	-
	VR 0075	Root & Tuber Vegetables {except carrot}	-	0.5
Pirimicarb		Vegetables {except Celериac; Celery; Leafy vegetables; Onion, Welsh; Pulses; Shallot; Spring onion; Sweet corn (corn-on-the-cob)}	T*0.05	-
	VR 0075	Root & Tuber Vegetables	-	0.05
Prometryn		Vegetables	*0.1	-
Propargite		Vegetables	3	-
Pydiflumetofen	VR 0075	Root & Tuber Vegetables {except potato}	0.3	-
	VR 2070	Root Vegetables {except carrot}		0.3
	VR 2071	Tuberous & Corm Vegetables	-	0.1
Pyraclostrobin	VR 2070	Root Vegetables {except sugar beet}		0.5
	VR 2071	Tuberous & Corm Vegetables	-	*0.02
Pyrethrins		Vegetables	1	-
	VR 0075	Root & Tuber Vegetables	-	*0.05
Pyriproxyfen	VR 0508	Sweet Potato	*0.05	-
Sethoxydim	VR 0075	Root & Tuber Vegetables	1	-
Spinetoram	VR 0075	Root & Tuber Vegetables	0.02	-
Spinosad	VR 0075	Root & Tuber Vegetables	0.02	-
Spiromesifen	VR 0508	Sweet Potato	-	*0.02
Spirotetramat	VR 0508	Sweet Potato	5	-
Sulfoxaflor	VR 0075	Root & Tuber Vegetables {except potato}	0.05	-
	VR 0075	Root & Tuber Vegetables {except carrot}	-	0.03
Tetraniliprole	VR 2071	Tuberous & Corm Vegetables	*0.01	0.02
Thiabendazole	VR 0508	Sweet Potato	0.05	Po9
Thiamethoxam	VR 0075	Root & Tuber Vegetables	T0.7	0.3
Trichlorfon		Vegetables {except Beetroot; Brussels sprouts; Cape gooseberry; Cauliflower; Celery; Egg plant, Thai; Leafy vegetables; Pepino; Peppers; Pulses (dry); Sweet corn (corn-on-the-cob)}	0.1	-
Trifluralin		Vegetables {except Carrot; Parsnip; Fennel, bulb; Galangal, greater}	0.05	-

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 12. Prepared 29 November 2025. CODEX MRLs: CODEX Alimentarius International Food Standards database (December 2025), <http://www.fao.org/fao-who-codexalimentarius/codex-texts/dbs/pestres/en/>



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 Sweet Potato in Australia, as well as assisting with any current initiatives aimed at identifying and addressing pest management deficiencies.

Prepared by DTS Regulatory Consultants. This document was prepared as part of the Hort Innovation funded project MT24008 – Regulatory Support & Response Co-ordination.

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

Sweet Potato - Agrichemical Regulatory Risk Assessment

Blue text = new APVMA approved uses

INSECTICIDES/MITICIDES/NEMATICIDES - Insect and other pests

Active Constituent	MoA Group	Pest	Risks and Comments
ABAMECTIN	6	Root-knot nematode Permit PER84249 for the control of Tomato Potato Psyllid	Australia: APVMA nominated for reconsideration and spray drift assessment. Codex MRL: *0.005 mg/Kg Canada: Re-evaluation finalised. Label amendments to mitigate risks to human health and environment (July, 2025)
AFIDOPYROPEN	9D	Green peach aphid Cabbage aphid Currant lettuce aphid Cotton aphid/Melon aphid	Australia: No current concerns. EU: Not approved
<i>Bacillus thuringiensis</i>	11A	Armyworm Cotton bollworm Native budworm Cabbage moth Cabbage white butterfly Loopers Lightbrown apple moth Vine moth	Australia: No current concerns. USA: Under Registration Review (scheduled)

Active Constituent	MoA Group	Pest	Risks and Comments
BIFENTHRIN	3A	Wireworm Sweet potato weevil PER84249 for the control of tomato potato psyllid	Australia: APVMA nominated for reconsideration after 2029. Permit PER84249 Expiry date: 30/09/2026 Codex MRL: 0.05 mg/Kg EU: Not approved Canada: Cancelled
CARBARYL	1A	Sweet potato weevil	Australia: No current concerns. Codex MRL: *0.02 mg/Kg EU: Not approved Canada: In re-evaluation USA: Under Registration Review (scheduled)
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 USA: Agricultural uses cancelled. Very few registrations as Restricted Use Pesticide.
CYANTRANILIPROLE	28	Permit PER84805 for the control of Tomato Potato Psyllid	Australia: No current concerns. Permit PER84805 Expiry date: 31/12/2027 Codex MRL: 0.05 mg/Kg
CYROMAZINE	17	Permit PER81867 for the control of Leafminer	Australia: No current concerns. Permit PER81867 Expiry date: 30/09/2026 EU: Not approved
DIMETHOATE	1B	Leafhoppers Green vegetable bug Thrips Wingless grasshoppers	Australia: APVMA reconsideration. Prioritised to be commenced by 2029. EU: Not approved Canada: In re-evaluation USA: Under Registration Review (scheduled)

Active Constituent	MoA Group	Pest	Risks and Comments
EMAMECTIN	6	Diamondback Moth (Cabbage Moth)(<i>Plutella xylostella</i>), Cabbage White Butterfly (<i>Pieris rapae</i>) Heliothis (<i>Helicoverpa</i> spp.) Cluster caterpillar (<i>Spodoptera litura</i>) Loopers (<i>Chrysodeixis</i> spp.) Cabbage Centre Grub (<i>Hellula Hydralis</i>)	Australia: APVMA Nominated for targeted spray drift reconsideration EU: Approved, candidate for substitution. UK: Withdrawn (2024).
FIPRONIL	2B	Wireworm Mole Cricket Whitefringed Weevil	Australia: APVMA: Currently under review . Proposed Regulatory decision expected by April 2026. EU: Not approved USA: Under Registration Review (scheduled)
FLUAZAINDOLIZINE	N-UN	Root-knot nematodes	Australia: No current concerns. EU: Pending
FLUBENDIAMIDE	28	Diamondback moth Cabbage white butterfly Cluster caterpillar	Australia: No current concerns. EU: Not approved UK: Withdrawn (2024).
FLUENSULFONE	5	Root-knot nematode	Australia: No current concerns. Codex MRL: 0.8 mg/Kg
FLUOPYRAM	N-3	Root-knot nematode	Australia: No current concerns.
FLUPYRADIFURONE	4D	Green peach aphid silverleaf whitefly	Australia: No current concerns. Codex MRL: 0.05 mg/Kg
IMIDACLOPRID	4A	Aphids Thrips Jassids Two spotted mite Wireworms Silverleaf whitefly	Australia:APVMA: Currently under review . Proposed regulatory decisions expected between December2025 to October2026. Codex MRL: 0.5 mg/Kg EU: Not approved Canada: Very few uses allowed in greenhouses and seed treatment. USA: Under Registration Review (scheduled)

Active Constituent	MoA Group	Pest	Risks and Comments
METALDEHYDE FIPRONIL	-- + 2B	European Earwigs, Portuguese Millipedes, Slaters Snails Slugs	<p>METALDEHYDE Australia: No current concerns. Canada: In re-evaluation</p> <p>FIPRONIL Australia: APVMA: Currently under review. Proposed Regulatory decision expected by April 2026. EU: Not approved USA: Under Registration Review (scheduled)</p>
METHOMYL	1A	Permit PER82428 for the control of Helicoverpa spp., Cucumber Moth, Cluster Caterpillar, Loopers, Webworm, Rutherglen Bug and Thrips (including Western Flower Thrips)	<p>Australia: APVMA reconsideration. Prioritised to be commenced by 2026. Permit PER84249 Expiry date: 30/09/2026 EU: Not approved Canada: In re-evaluation USA: Under Registration Review (scheduled)</p>
OXAMYL	1A	Root-knot nematode	<p>Australia: No current concerns. EU: Not approved UK: Withdrawn (2024). Canada: In re-evaluation</p>
PIPERONYL BUTOXIDE PYRIPROXYFEN	-- + 7C	Silverleaf whitefly	<p>PIPERONYL BUTOXIDE Australia: No current concerns. Codex MRL: 0.5 mg/Kg USA: Under Registration Review (scheduled)</p> <p>PYRIPROXYFEN Australia: No current concerns.</p>

Active Constituent	MoA Group	Pest	Risks and Comments
PIRIMICARB	1A	Aphids including Green peach aphid, Melon aphid and Cabbage aphid	Australia: No current concerns. Codex MRL: 0.05 mg/Kg EU: Approved, candidate for substitution. Canada: Cancelled
PYRIPROXYFEN	7C	Silverleaf whitefly	Australia: No current concerns.
SPINETORAM	5	Tomato potato psyllid	Australia: No current concerns. EU: Not approved UK: Withdrawn (2024). Canada: In re-evaluation
SPINETORAM	5	Permit PER94451 for the control of leaf miners	Australia: No current concerns. Permit PER94451 Expiry date: 31/07/2027 EU: Not approved UK: Withdrawn (2024). Canada: In re-evaluation
SPINOSAD	5	Potato moth Permit PER94331 for the control of leaf miners	Australia: No current concerns. Permit PER94331 Expiry date: 30/04/2026 Canada: In re-evaluation
SPIROTETRAMAT	23	Silverleaf whitefly PER84245 for the control of Tomato potato psyllid	Australia: No current concerns. Permit PER84245 Expiry date: 31/12/2029 EU: Not approved Canada: In re-evaluation
SPODOPTERA FRUGIPERDA NPV	--	Permit PER91477 and Permit PER90820 for the control of Fall Amyworm	Australia: No current concerns. Permit PER91477 Expiry date: 31/03/2027 Permit PER90820 Expiry date: 31/03/2027

Active Constituent	MoA Group	Pest	Risks and Comments
SULFOXAFLOX	4C	Green peach aphid Tomato-potato psyllid Rutherglen bug	Australia: No current concerns. Codex MRL: 0.03 mg/Kg
ZINC PHOSPHIDE	24A	PER13151 for the control of House Mouse and Introduced Rats	Australia: No current concerns. Permit PER13151 Expiry date: 31/03/2027 UK: Withdrawn (2024). Canada: In re-evaluation USA: Under Registration Review (scheduled)

FUNGICIDES – Disease Control

Active Constituent	MoA Group	Pest	Risks and Comments
BOSCALID	7	Sclerotinia rot	Australia: No current concerns. Codex MRL: 2 mg/Kg Canada: In re-evaluation
COPPER	M1	Leaf spot	Australia: No current concerns.
IODINE	M	*Post Harvest sanitiser	Australia: No current concerns. Canada: Cancelled
PENTHIOPYRAD	7	Early blight Powdery mildew	Australia: No current concerns.

Active Constituent	MoA Group	Pest	Risks and Comments
PYDIFLUMETOFEN DIFENOCONAZOLE	7 + 3	Early blight Powdery mildew Cercospora leaf spot	<p>PYDIFLUMETOFEN Australia: No current concerns. EU: Pending Canada: In re-evaluation</p> <p>DIFENOCONAZOLE Australia: APVMA nominated for reconsideration after 2029. Codex MRL: 4 mg/Kg EU: Approved, candidate for substitution. Canada: In re-evaluation</p>
THIABENDAZOLE	1	PER12047 for the control of field rots caused by scurf & root rot	<p>Australia: No current concerns. Permit PER12047 Expiry date: 30/09/2026 Codex MRL: 9 mg/Kg</p>

HERBICIDES – Weed Control

Active Constituent	MoA Group	Risks and Comments
DIQUAT	22	Australia:APVMA: Currently under review Publication of the final regulatory decision is expected in Mid 2026. EU: Not approved USA: No agricultural uses allowed. Aquatic herbicide.
FLUAZIFOP-P PRESENT AS THE BUTYL ESTER	1	Australia: APVMA Nominated for targeted spray drift reconsideration Permit PER82556 Expiry date: 30/11/2027 Canada: Cancelled
GLYPHOSATE	9	Australia: APVMA Nominated for targeted spray drift reconsideration USA: Under Registration Review (scheduled)
METOLACHLOR	15	Australia: No current concerns. EU: Not approved Canada: Cancelled
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. Codex MRL: 0.05 mg/Kg EU: Not approved Canada: Cancelled USA: Restricted use
SETHOXYDIM	1	Australia: No current concerns. EU: Not approved Canada: Phase-Out
S-METOLACHLOR	15	Australia: No current concerns. EU: Not approved

FUMIGANTS – Mixed Function

Active Constituent	Use	Risks and Comments
CHLOROPICRIN + 1,3-DICHLOROPROPENE	Control of soil borne diseases, plant parasitic Nematodes, Symphylans and Wireworms	<p>CHLOROPICRIN Australia: No current concerns. EU: Not approved USA: Restricted use</p> <p>1,3-DICHLOROPROPENE Australia: No current concerns. EU: Pending Canada: Cancelled</p>
DAZOMET	Control of bacterial spot (Xanthomonas spp.) (suppression only). Soil insects and nematodes	Australia: No current concerns. USA: Under Registration Review (scheduled)
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.

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