

SWEET POTATO Agrichemical Regulatory Risk Assessment

June 2025

Regulatory pressures on agrichemicals are increasing globally, with many being either restricted or withdrawn from use.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.

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

Blue text = new APVMA approved uses

INSECTICIDES/MITICIDES/NEMATODES - 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. Permit PER84249 Expiry date: 30/09/2026 Codex MRL: *0.005 mg/Kg EU: Approved Canada: In review
AFIDOPYROPEN	9D	Green peach aphid Cabbage aphid Currant lettuce aphid Cotton aphid/Melon aphid	Australia: No current concerns. EU: Not approved UK: No registrations Canada: No current review USA: Approved
BIFENTHRIN	3A	Wireworm Sweet potato weevil Permit 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: No current review
CARBARYL	1A	Sweet potato weevil	Australia: No current concerns. Codex MRL: *0.02 mg/Kg EU: Not approved Canada: In review USA: Review upcoming

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ACTIVE CONSTITUENT	MoA Group	Pest	Risks and Comments
CHLORPYRIFOS	1B	Permit PER14583 for the control of Sweet potato weevil, Wireworm	Australia: The APVMA issued a Final Decision in September 2024. Most uses were cancelled. Products with previously approved labels must not be possessed or used after September 30, 2025. Permit PER14583 Expiry date: 31/07/2025 Codex: All MRLs deleted EU: Not approved Canada: All uses cancelled 2023 USA: Upcoming review
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 EU: Approved UK: Approved Canada: No current review
CYROMAZINE	17	Permit PER81867 for the control of Leafminer	Australia: Reviewed in 2014. No current concerns. Permit PER81867 Expiry date: 30/09/2026 EU: Not approved Canada: No current review
DIMETHOATE	1B	Leafhoppers Green vegetable bug Thrips Wingless grasshoppers	Australia: APVMA reconsideration. Prioritised to be commenced by 2029. EU: Not approved Canada: In review USA: Review upcoming
FIPRONIL	2B	Wireworm Mole Cricket Whitefringed Weevil	Australia: APVMA: Currently under review. Proposed Regulatory decision expected by June 2025. EU: Not approved USA: Review upcoming

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FLUAZAINDOLIZINE	N-UN	Root-knot nematodes	Australia: No current concerns. EU: Pending Canada: No current review
FLUBENDIAMIDE	28	Diamondback moth Cabbage white butterfly Cluster caterpillar	Australia: No current concerns. EU: Not approved UK: Withdrawn. Expiry date: 30/11/2024 Canada: No current review USA: No registrations
FLUENSULFONE	5	Root-knot nematode	Australia: No current concerns. Codex MRL: 0.8 mg/Kg Canada: No current review
FLUOPYRAM	Non-IRAC	Root-knot nematode	Australia: No current concerns. EU: Approved UK: Approved Canada: No current review
FLUPYRADIFURONE	4D	Green peach aphid silverleaf whitefly	Australia: No current concerns. Codex MRL: 0.05 mg/Kg EU: Approved UK: Approved Canada: No current review
IMIDACLOPRID	4A	Aphids Thrips Jassids Two spotted mite and wireworms Silverleaf whitefly	Australia: APVMA: APVMA: Currently under review. Proposed regulatory decisions expected between Dec. 2025 to Oct. 2026. Codex MRL: 0.5 mg/Kg EU: Not approved Canada: Field uses cancelled or amended USA: Re-registration with risk mitigation measures. Review upcoming

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LAMBDA-CYHALOTHRIN	3A	Permit PER84249 for the control of Tomato Potato Psyllid	Australia: No current concerns. Permit PER84249 Expiry date: 30/09/2026 EU: Approved, candidate for substitution. UK: Approved Canada: No current review
METALDEHYDE FIPRONIL	-- + 2B	European Earwigs, Portuguese Millipedes, Slaters Snails, Slugs	METALDEHYDE Australia: No current concerns. EU: Approved UK: Approved Canada: In review FIPRONIL Australia: APVMA: APVMA: Currently under review. Proposed Regulatory decision expected by June 2025. EU: Not approved USA: Review upcoming
METHOMYL	1A	Permit PER84249 for the control of Tomato Potato Psyllid	Australia: APVMA reconsideration. Prioritised to be commenced by 2026. Permit PER84249 Expiry date: 30/09/2026 EU: Not approved Canada: In review USA: Review upcoming
OXAMYL	1A	Root-knot nematode	Australia: No current concerns. EU: Not approved UK: Withdrawn. Expiry date: 31/01/2024 Canada: In review

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PIPERONYL BUTOXIDE PYRIPROXYFEN	-- + 7C	Silverleaf whitefly	<p>PIPERONYL BUTOXIDE Australia: No current concerns Codex MRL: 0.5 mg/Kg UK: Approved Canada: No current review USA: Review upcoming</p> <p>PYRIPROXYFEN Australia: No current concerns. EU: Approved UK: Approved Canada: No current review</p>
PIRIMICARB	1A	Aphids including: Green peach aphid Melon aphid and Cabbage aphid	<p>Australia: No current concerns. Codex MRL: 0.05 mg/Kg EU: Approved, candidate for substitution. UK: Approved Canada: No current review USA: No registrations</p>
PYRIPROXYFEN	7C	Silverleaf whitefly	<p>Australia: No current concerns. EU: Approved UK: Approved Canada: No current review</p>
SPINETORAM	5	Tomato potato psyllid Permit PER94451 for the control of leaf miners Permit PER84757 for the control of Tomato Potato Psyllid	<p>Australia: No current concerns. Permit PER84757 Expiry date: 31/08/2025 Permit PER94451 Expiry date: 31/07/2027 EU: Not approved UK: Withdrawn. Expiry date: 30/09/2024 Canada: In review</p>

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ACTIVE CONSTITUENT	MoA Group	Pest	Risks and Comments
SPINOSAD	5	Potato moth Permit PER94331 for the control of leaf miners	Australia: Reviewed in 2014. No current concerns. Permit PER94331 Expiry date: 30/04/2026 EU: Approved UK: Approved Canada: In review
SPIROTETRAMAT	23	Silverleaf whitefly Permit PER84245 for the control of Tomato potato psyllid	Australia: No current concerns. Permit PER84245 Expiry date: 31/12/2029 EU: Not approved UK: Approved Canada: In review
Spodoptera frugiperda NPV	31	Permit PER91477 for the control of Fall Amyworm Permit PER90820 for the control of Fall Amyworm	Australia: No current concerns. Permit PER91477 Expiry date: 31/03/2027
SULFOXAFLOX	4C	Green peach aphid Tomato-potato psyllid Rutherglen bug	Australia: No current concerns. Codex MRL: 0.03 mg/Kg EU: Approved UK: Approved Canada: No current review

FUNGICIDES – Disease Control

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Active Constituent	MoA Group	Pest	Risks and Comments
BOSCALID	7	Sclerotinia rot	Australia: No current concerns. Codex MRL: 2 mg/Kg EU: Approved UK: Approved Canada: In review
CALCIUM HYPOCHLORITE	1	Bacterial soft rot (postharvest treatment)	Australia: No current concerns.
COPPER	M1	Leaf spot	Australia: No current concerns. EU: Approved, candidate for substitution. Canada: No current review
DAZOMET	--	Damping-off Rhizoctonia	Australia: APVMA: no current concerns. Codex MRL: EU: Approved UK: Approved Canada: Phase-Out USA: Review upcoming
IODINE	M	*Post Harvest sanitiser	Australia: No current concerns. Canada: No current review
PENTHIOPYRAD	7	Early blight Powdery mildew	Australia: No current concerns. EU: Approved UK: Approved Canada: No current review

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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 UK: Approved Canada: In review</p> <p>DIFENOCONAZOLE Australia: APVMA nominated for reconsideration after 2029 Codex MRL: 4 mg/Kg EU: Approved, candidate for substitution. UK: Approved Canada: In review</p>
THIABENDAZOLE	1	Field rots caused by scurf & root rot	<p>Australia: No current concerns. Permit PER12047 Expiry date: 30/09/2026 Codex MRL: 9 mg/Kg EU: Approved UK: Approved Canada: No current review</p>

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HERBICIDES – Weed Control

Active Constituent	MoA Group	Risks and Comments
CHLORTHAL DIMETHYL	3	<p>APVMA cancelled all products containing chlorthal dimethyl in October 2024. The use of chlorthal dimethyl as an agricultural chemical product is now illegal.</p> <p>EU: Not approved</p>
DIQUAT (Root and Tuber Vegetables)	22	<p>APVMA proposed decisions published July 2024. Some use in Root and Tuber vegetables is proposed to be kept (Only uses up to 283gai/ha). Publication of the final regulatory decision is expected in December 2025.</p> <p>Codex: No MRLs.</p> <p>EU: Not approved (withdrawn in 2018).</p> <p>UK: Not approved. USA: Registered (under review).</p>
FLUAZIFOP-P present as the BUTYL ESTER	1	<p>Australia: APVMA nominated for reconsideration and for targeted spray drift reconsideration</p> <p>Permit PER82556 Expiry date: 30/11/2027</p> <p>EU: Approved</p> <p>Canada: No current review</p>
GLYPHOSATE	9	<p>Australia: APVMA nominated for reconsideration and for targeted spray drift reconsideration</p> <p>EU: Approved, UK: Approved</p> <p>Canada: No current review</p> <p>USA: Review upcoming</p>
METOLACHLOR	15	<p>Australia: No current concerns.</p> <p>EU: Not approved</p> <p>Canada: No current review</p>
PARAQUAT Root and Tuber Vegetables)	22	<p>APVMA proposed decisions published July 2024. Only uses up to 231gai/ha to be kept. Publication of the final regulatory decision is expected in December 2025.</p> <p>Codex: MRL for Root and tuber vegetables - 0.05 mg/Kg.</p> <p>EU: Not approved (withdrawn in 2018).</p> <p>UK: Not approved. USA: Registered (under review).</p>
SETHOXYDIM	1	<p>Australia: No current concerns.</p> <p>EU: Not approved</p> <p>Canada: Phase-Out</p>

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Active Constituent	MoA Group	Risks and Comments
S-METOLACHLOR	15	Australia: No current concerns. EU: Not approved UK: Approved

PLANT GROWTH REGULATORS – and others

Active Constituent	Use	Risks and Comments
ZINC PHOSPHIDE	<p>Rodenticides</p> <p>Permit PER93053 for the control of house mouse and introduced rats</p> <p>Permit PER13151 for the control of house mouse and introduced rats</p>	<p>Australia: No current concerns. Permit PER93053 Expiry date: 30/11/2025 Permit PER13151 Expiry date: 31/03/2027 EU: Approved UK: Withdrawn. Expiry date: 31/07/2024 Canada: In review USA: Review upcoming</p>

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