



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Regulatory pressures on agrichemicals are increasing globally, with many being either restricted or withdrawn from use.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

INSECTS AND OTHER PESTS

Active constituent	MoA group	Insects and other pests	Risks & Comments
1,3-dichloropropene + chloropicrin	8B	Symphylids	1,3-dichloropropene: Australia: APVMA: no current concerns. EU: Pending. Canada: No current review. Chloropicrin: Australia: APVMA: no current concerns. EU: Not approved. Canada: No current review.
		Wireworms	
Abamectin	6	Two-spotted (red spider) mite	Australia: APVMA nominated for reconsideration and spray drift assessment. EU: Approved. Canada: In review. Codex: MRL set at 0.15 mg/kg (2016).
		Western flower thrips	
Afidopyropen	9D	Cabbage aphid	Australia: No current concerns. EU: Not approved. UK: No registrations. Canada: No current review. USA: Approved. Codex: MRL set at 0.15 mg/kg (2023).
		Cotton (melon) aphid	
		Green peach aphid	
		Silverleaf (poinsettia) whitefly	
Bifenazate	20D	Bryobia mite	EU: Approved. UK: Approved. Canada: In review. Codex: MRL set at 2 mg/kg (2007).
		Two-spotted (red spider) mite	
Carbaryl	1A	Grasshoppers	Australia: No current concerns. EU: Not approved. Canada: In review. USA: Upcoming review. Codex: No MRLs.
Chlorantraniliprole	28	Cluster caterpillar	Australia: No current concerns. EU: Approved. UK: Approved.
		Helicoverpa species	

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			Canada: In review. Codex: Berries and small fruits MRL set at 1 mg/kg (2011).
Chlorpyrifos	1B	Field cricket, mole cricket (bait) (label) Scarab beetles (PER81745)	PER11843 to expire 31-Jul-2026. Australia: The APVMA issued a final decision in September 2024. Uses in fruit were cancelled. Products with previously approved labels should not be possessed or used after September 30, 2025. The final decision was published in the APVMA Official Gazette on October 3, 2024. EU: Not approved. Canada: In review. USA: Upcoming review. Codex: MRLs revoked.
Cyantraniliprole	28	Cluster caterpillar Cotton (melon) aphid Green peach aphid Helicoverpa species Light brown apple moth Onion thrips Plague thrips Strawberry aphid Western flower thrips	EU: Approved. UK: Approved. Canada: No current review. Codex: MRL set at 1.5 mg/kg (2019).
Cyflumetofen	25A	Two spotted mite European red mite	Australia: No current concerns. EU: Approved. UK: Approved. Canada: No current review. Codex: MRL set at 0.6 mg/kg (2015).
Dimethoate	1B	Aphids Green vegetable bug Jassids Redlegged earth mite Rutherglen bug Spider mite Strawberry bug Thrips Wingless grasshopper	Australia: APVMA reconsideration . Prioritised to be commenced by 2029. EU: Not approved. Canada: In review. USA: Upcoming review.
Enamectin benzoate	6	Cluster caterpillar Helicoverpa species	

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		Light brown apple moth	
		Loopers	
Emulsifiable botanical oil	-	Two-spotted mite	
		Aphids	
Ethyl formate	8A	Western flower thrips	Australia: APVMA: no current concerns. EU: Not approved.
Fenbutatin oxide	12B	Two-spotted (red spider) mite	Australia: APVMA nominated for reconsideration . EU: Not approved. Canada: In review. USA: Upcoming review. Codex: MRL set at 10 mg/kg (1995). To be reviewed by JMPR.
Fenbutatin oxide + hexythiazox	12 + 10A	Two-spotted mite	Fenbutatin oxide: Australia: APVMA nominated for reconsideration . EU: Not approved. Canada: In review. USA: Upcoming review. Codex: To be reviewed by JMPR. Hexythiazox: EU: Approved. UK: Approved. Canada: No current review. Codex: MRL set at 6 mg/kg (2013).
Flonicamid	29	Aphids	Canada: No current review.
		Green mirid	
		Green peach aphid	
		Whiteflies	
Flubendiamide	28	Cluster caterpillar	Australia: No current concerns. EU: Not approved. UK: Withdrawn. Canada: No current review. USA: No registrations.
		Helicoverpa species	
Helicoverpa NPV (nuclear polyhedrosis virus)	31	Helicoverpa species	Australia: No current concerns. EU: Approved.
Hexythiazox	10A	Two-spotted (red spider) mite	EU: Approved. UK: Approved. Canada: No current review. Codex: MRL set at 6 mg/kg (2013).
Hexythiazox + piperonyl	10A	Two-spotted mite	Hexythiazox: Australia: No current concerns.

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butoxide			EU: Approved. UK: Approved. Canada: No current review. Codex: MRL set at 6 mg/kg (2013). Piperonyl butoxide : UK: Approved. Canada: No current review. USA: Upcoming review.
Milbemectin	6	Two-spotted (red spider) mite	EU: Approved. UK: Withdrawn.
Indoxacarb	22A	Garden weevil	PER14192 expires 31/07/2028.
		White fringed weevil (PER14192)	EU: Not approved. UK: Withdrawn.
Malathion	1B	Fruit flies	PER13542 expires 31/05/2030.
		Rutherglen bug (PER13542)	Australia: The final regulatory decision was published in an APVMA Special Gazette on 2 May 2024. Labels containing malathion as an active constituent have been varied. Products bearing previously approved labels must not be supplied after 1 May 2026.
		Lygaeid bugs (PER13542)	EU: Approved. UK: Withdrawn. Canada: In review. USA: Upcoming review. Codex: MRL set at 1 mg/kg. Re-evaluation scheduled.
Methomyl	1A	Australian cabbage looper	Australia: APVMA reconsideration . Prioritised to be commenced by 2026.
		Cluster caterpillar	EU: Not approved.
		Helicoverpa species	Canada: In review.
		Light brown apple moth	USA: Upcoming review.
		Loopers	
Orange oil	-	Silverleaf whitefly	EU: Approved.
		Two-spotted (red spider) mites	UK: Approved. Canada: No current review.
Paraffinic oil / petroleum oil	UNM	Aphids	Australia: No current concerns.
		Mites	
Pirimicarb	1A	Aphids	Australia: No current concerns. EU: Approved, candidate for substitution. UK: Approved. Canada: No current review.

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			USA: No registrations. Codex: Berries and small fruits MRL set at 1 mg/kg (2007). JMPR re-evaluation scheduled.
Propargite	12C	Mites Two-spotted (red spider) mite	Australia: APVMA reconsideration . Prioritised to be commenced by 2029. EU: Not approved. Canada: No current review. USA: Upcoming review.
Pyrethrins	3A	Cabbage aphid Cabbage white butterfly Caterpillars Fruit flies Greenhouse whitefly Light brown apple moth Plague thrips Rutherglen bug	Australia: No current concerns. EU: Approved. UK: Approved. Canada: No current review.
Pyrethrins + piperonyl butoxide	3A	Black citrus aphid Rose aphid Aphids – cabbage Aphids – green peach Cabbage white butterfly Pear and cherry slug Rutherglen bug Greenhouse whitefly Light brown apple moth Plague thrips Large-bodied caterpillars (e.g. grapevine moth, native budworm)	Pyrethrins: Australia: No current concerns. EU: Approved. UK: Approved. Canada: No current review. Piperonyl butoxide: UK: Approved. Canada: No current review. USA: Upcoming review.
Pyriproxyfen	7C	Greenhouse whitefly (PER13331) Silverleaf whitefly (PER13331)	PER13331 expires 31/05/2030. EU: Approved. UK: Approved. Canada: No current review.
Rotenone	21B	Aphids Caterpillars	EU: Not approved. Canada: In review.
Spinetoram	5	Caterpillars Helicoverpa species Light brown apple moth	PER87408 expires 28/02/2029. Australia: No current concerns. EU: Not approved.

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		Loopers	UK: Withdrawn.
		Western flower thrips	Canada: In review.
		Fruit flies (PER87408)	Codex: MRL set at 0.15 mg/kg (2018).
Spinosad	5	Helicoverpa species	Australia: Reviewed in 2014. No current concerns.
		Light brown apple moth	EU: Approved.
		Loopers	UK: Approved.
		Western flower thrips	Canada: In review.
Sulfoxaflor	4C	Green mirid	Australia: No current concerns.
		Green peach aphid	EU: Approved. UK: Approved. Canada: No current review. Codex: MRL set at 0.5 mg/kg (2013).
Trichlorfon	1B	Cluster caterpillar	PER12486 expires 31/03/2026.
		Cutworms	Australia: APVMA nominated for reconsideration .
		Fruit flies (PER12486)	EU: Not approved. Canada: No current review. USA: Upcoming review.

DISEASES

Active constituent	MoA Group	Disease	Risks & Comments
1,3-dichloropropene + chloropicrin	-	Fusarium wilt	1,3-dichloropropene: Australia: APVMA: no current concerns. EU: Pending. Canada: No current review. Chloropicrin: Australia: APVMA: no current concerns. EU: Not approved. Canada: No current review.
		Pythium diseases – soil borne	
		Rhizoctonia rot	
		Verticillium wilt	
<i>Aureobasidium pullulans</i>	-	Grey mould	
		Phomopsis leaf blight / fruit rot	
		Rhizopus fruit rot	
<i>Bacillus amyloliquefaciens</i>	BM02	Botrytis rot	
		Grey mould	
BLAD	BM01	Botrytis grey mould	
Bupirimate	8	Powdery mildew (nursery non-fruitle only)	EU: Approved. UK: Approved.

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Captan	M4	Black spot	EU: Approved. UK: Approved. Canada: No current review. Codex: MRL set at 15 mg/kg (2008). Review scheduled for 2025.
		Grey mould	
		Leaf scorch (red spot)	
		Phomopsis leaf blight / fruit rot	
		Phytophthora fruit rot	
		Ripe fruit rot	
Copper	M1	Leaf diseases / spots	
		Leaf scorch (red spot)	
		Eye spot	
		Grey mould	
Cyanogen (Ethanedinitrile)	-	Charcoal stem rot	Australia: No current concerns.
		Damping off	
		Fusarium wilt	
		Phytophthora trunk / collar rot	
		Pythium diseases – soil borne	
		Rhizoctonia rot	
		Root and collar rot	
		Sclerotium crown rot	
		Spot blotch	
Cyflufenamid	U6	Powdery mildew	EU: Approved. UK: Approved. Canada: No current review.
Cyprodinil + fludioxonil	9 + 12	Colletotrichum crown and petiole rots	Cyprodinil: Australia: No current concerns. EU: Approved - candidate for substitution. UK: Approved. Canada: In review. Codex: Berries and small fruits MRL set at 10 mg/kg (2014). Fludioxonil: Australia: No current concerns. EU: Approved - candidate for substitution. UK: Approved. Canada: No current review. Codex: MRL set at 3 mg/kg (2006).
		Grey mould	
Emulsifiable botanical oil	-	Sooty mould	
Fenhexamid	17	Grey mould	EU: Approved.

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			UK: Approved. Canada: No current review. Codex: MRL set at 10 mg/kg (2006).
Florylpicoxamid	21	Botrytis / grey mould	EU: Pending. Canada: No current review. Codex: MRL set at 1.5 mg/kg (2024).
		Powdery mildew	
Fluazinam	29	<i>Gnomoniopsis fruticola</i> / leaf blotch (PER83871 – runners only)	PER83871 expires 30/06/2027. EU: Approved. UK: Approved. Canada: In review.
Fluopyram + tebuconazole	7 + 3	Botrytis / grey mould	Fluopyram: EU: Approved. UK: Approved. Canada: No current review. Codex: MRL set at 0.4 mg/kg (2013). Tebuconazole: Australia: APVMA: Removed from nomination list - maintain watching brief. EU: Approved - candidate for substitution. UK: Approved. Canada: In review. USA: Upcoming review.
Fluopyram + trifloxystrobin	7 + 11	Powdery mildew	Fluopyram: EU: Approved. UK: Approved. Canada: No current review. Codex: MRL set at 0.4 mg/kg (2013). Trifloxystrobin: Australia: No current concerns. EU: Approved. UK: Approved. Canada: In review. Codex: MRL set at 1 mg/kg (2013).
Iodine	M	Bactericide	Australia: No current concerns. Canada: No current review.
Iodomethane	8A	Damping off fungi: <i>Fusarium</i> , <i>Pythium</i> , <i>Phytophthora</i> , <i>Rhizoctonia</i> , <i>Sclerotium</i> <i>rolfsii</i> , <i>Macrophomina phaseolina</i>	Australia: APVMA: no current concerns.
Ipflufenquin	52	Botrytis	EU: Pending. Canada: No current review.
Iprodione	2	Grey mould	Australia: No current concerns.

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			EU: Not approved. Not renewed due to concerns over toxicity and potential endocrine-disrupting effects. MRLs are set at or near the limit of detection. Canada: Several food crop uses deleted. USA: Upcoming review. Codex: Review scheduled.
Isofetamid	7	Grey mould	EU: Approved. UK: Approved. Canada: No current review.
Mancozeb + metalaxyl	M3 + 4	Eye spot	Mancozeb: Australia: APVMA reconsideration . Prioritised to be commenced by 2027. EU: Not approved. UK: Withdrawn. Canada: No current review. USA: Upcoming review. Codex: To be reviewed. Metalaxyl: Australia: No current concerns. EU: Approved, candidate for substitution. UK: Approved. Canada: In review.
		Leaf scorch (red spot)	
		Phomopsis leaf blight / fruit rot	
		Phytophthora fruit rot	
Metalaxyl-M	4	Root and crown rot (PER13697 – runners only)	PER13697 expires 30/09/2027. EU: Approved. UK: Approved.
Myclobutanil	3	Powdery mildew	Australia: APVMA nominated for reconsideration after 2029. EU: Not approved. UK: Withdrawn. Canada: In review. Codex: MRL set at 0.8 mg/kg (2015).
Orange oil	-	Powdery mildew	EU: Approved. UK: Approved. Canada: No current review.
Penthiopyrad	7	Grey mould	Australia: No current concerns. EU: Approved. UK: Approved. Canada: No current review. Codex: MRL set at 3 mg/kg (2013).
Phosphorous acid	33	Root and crown rot (PER13697 – runners only)	PER13697 expires 30/09/2027. PER80064 expires 31/10/2025.

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		Phytophthora crown rot (PER80064)	
Potassium bicarbonate	M2	Powdery mildew	Australia: No current concerns. Canada: In review.
Potassium bicarbonate + potassium silicate	M2	Powdery mildew	Potassium bicarbonate: Australia: No current concerns. Canada: In review.
Polyoxin-D zinc salt	19	Grey mould Powdery mildew	Canada: No current review.
Prochloraz (runners only)	3	Colletotrichum crown and stolon rot	EU: Not approved. UK: Approved. Codex: Periodic re-evaluation scheduled.
Pydiflumetofen + fludioxonil	7 + 12	Botrytis	Pydiflumetofen: Australia: No current concerns. EU: Pending. UK: Approved. Canada: In review. Fludioxonil: Australia: No current concerns. EU: Approved, candidate for substitution. UK: Approved. Canada: No current review. Codex: MRL set at 3 mg/kg (2006).
Pyraclostrobin	11	Colletotrichum crown rot (PER14483 – runners only)	PER14483 expires 30/09/2028. EU: Approved. UK: Approved. Canada: In review. Codex: MRL set at 1.5 mg/kg (2012).
Pyrimethanil	9	Grey mould	EU: Approved. UK: Approved. Canada: In review.
Quinoxifen	13	Powdery mildew	EU: Not approved. Canada: No current review. Codex: MRL set at 1 mg/kg (2007).
<i>Streptomyces lydicus</i>	BM02	Phytophthora crown rot Powdery mildew	
Sulphur	M2	Powdery mildew	Australia: No current concerns.
Thiram	M3	Black spot Grey mould	Australia: APVMA reconsideration . Prioritised to be commenced by 2027. EU: Not approved.

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			Canada: No current review. Codex: To be reviewed.
Trifloxystrobin	11	Powdery mildew	Australia: No current concerns. EU: Approved. UK: Approved. Canada: In review. Codex: MRL set at 1 mg/kg (2013).
Zineb	M3	Leaf diseases / spots Leaf scorch (red spot)	Australia: APVMA reconsideration . Prioritised to be commenced by 2027. EU: Not approved. Canada: No current review. Codex: To be reviewed.

OTHER

Active constituent	MoA group	Pest	Risks & Comments
Copper complex	-	Slugs and snails	
Fenamiphos	1B	Crimp nematodes (PER91381 - runner production only)	PER91381 expires 31/05/2025.
Iodomethane (runners only)	8A	Plant parasitic nematodes	Australia: APVMA: no current concerns.
Iron-EDTA complex	-	Slugs and snails White Italian (sand dune) snail	
Methiocarb	1A	Slugs and snails Slaters and millipedes	Codex: MRL set at 1 mg/kg (2003).

WEEDS

Active constituent	MoA Group	Weed	Risks & Comments
Fluazifop-p	1	Broadleaf weeds and grasses	Australia: APVMA nominated for reconsideration and for targeted spray drift reconsideration. Canada: No current review. Codex: MRL set at 3 mg/kg (2021).
Glufosinate-ammonium	10	Broadleaf weeds and grasses	Australia: APVMA: Nominated for targeted spray drift reconsideration (potential risk to vegetation, natural aquatic and bystander areas). Canada: In review. Codex: MRL set at 0.3 mg/kg (2013).

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Glyphosate	9	Broadleaf weeds and grasses	Australia: APVMA nominated for reconsideration for targeted spray drift reconsideration. EU: Approved. UK: Approved. Canada: No current review. USA: Upcoming review.
Simazine	5	Broadleaf weeds and grasses	EU: Not approved.

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