

November 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Regulatory pressures on agrichemicals are increasing globally, with many being either restricted or withdrawn from use.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 **mangoes** in Australia, as well as assisting with any current initiatives aimed at identifying and addressing pest management deficiencies.

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

INSECTICIDES/MITICIDES/NEMATICIDES - Insect and other pests

Blue text = new APVMA approved uses

Active Constituent	MoA Group	Pest	Risks and Comments
ACETAMIPRID PYRIPROXYFEN	4A + 7C	Banana-spotting bug / fruit-spotting bug	ACETAMIPRID Australia: APVMA: Currently under review. Proposed regulatory decisions expected between December 2025 to October 2026. Canada: In re-evaluation USA: Under Registration Review (scheduled) PYRIPROXYFEN Australia: No current concerns. Codex MRL: 0.02 mg/Kg
Bacillus thuringiensis	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)

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BETACYFLUTHRIN	3A	PER80374 for the control of: Fruit-spotting bug Banana-spotting bug Elephant or Rhino beetle Red-shouldered leaf beetle Swarming leaf beetle Longicorn trunk borer Macadamia nut borer Mango tip borer Flatid planthopper Green vegetable bug Lychee stink bug Yellow peach moth	Australia: No current concerns. Permit PER80374 Expiry date: 30/06/2028 EU: Not approved
BIFENTHRIN	3A	Termites (tree establishment – non-fruit bearing)	Australia: APVMA nominated for reconsideration after 2029. EU: Not approved Canada: Cancelled
BUPROFEZIN	16	Mango scales	Australia: No current concerns. Codex MRL: 0.1 mg/Kg
CARBARYL	1A	PER13484 for the control of Mango Leafhoppers	Australia: No current concerns. Permit PER13484 Expiry date: 31/05/2030 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.

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CLOTHIANIDIN	4A	PER83944 for the control of Fruit Fly PER87799 for the control of Mango seed weevil	Australia: APVMA: Currently under review. Proposed regulatory decisions expected between December2025 to October2026. Permit PER83944 Expiry date: 31/03/2026 Permit PER87799 Expiry date: 31/03/2026 Codex MRL: 0.04 mg/Kg EU: Not approved Canada: In re-evaluation USA: Under Registration Review (scheduled)
DIMETHOATE	1B	Lesser Queensland fruit fly (cover spray)	Australia: APVMA reconsideration. Prioritised to be commenced by 2029. Canada: In re-evaluation USA: Under Registration Review (scheduled)
ETOXAZOLE	10B	PER87232 for the control of Tea Red Spider Mite	Australia: No current concerns. Permit PER87232 Expiry date: 30/11/2026 EU: Approved, candidate for substitution.
FIPRONIL	2B	PER92765 and PER93940 for the control of Giant northern termite	Australia: APVMA: <u>Currently under review.</u> Proposed Regulatory decision expected by April 2026. Permit PER92765 Expiry date: 30/09/2027 Permit PER93940 Expiry date: 31/01/2026 EU: Not approved USA: Under Registration Review (scheduled)
FLUPYRADIFURONE	4D	Banana-spotting bug / fruit spotting bug	Australia: No current concerns.
MALATHION	1B	PER83998 for the control of Fruit flies including Queensland Fruit Fly & Mediterranean Fruit Fly	Australia: The final regulatory decision was published in an APVMA Special Gazette on 2 May 2024. Labels have been varied. Products bearing previously approved labels must not be supplied after 1 May 2026. Permit PER83998 Expiry date: 31/07/2026 UK: Withdrawn (2025). Canada: In re-evaluation USA: Under Registration Review (scheduled)

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METHOMYL	1A	PER84427 for the control of Redbanded thrips; Chilli thrips; Banana flower thrips and Tomato thrips.	Australia: APVMA reconsideration. Prioritised to be commenced by 2026. Permit PER84427 Expiry date: 31/12/2028 EU: Not approved Canada: In re-evaluation USA: Under Registration Review (scheduled)
METHOXYFENOZIDE	18	PER91798 for the control of Mango shoot looper	Australia: No current concerns. Permit PER91798 Expiry date: 31/12/2027 EU: Approved, candidate for substitution. Canada: In re-evaluation
PARAFFIN OIL		Mango seed weevil	Australia: No current concerns.
PYRETHRINS	3A	Fruitfly, Rutherglen bug, Spiders	Australia: No current concerns.
PYRIPROXYFEN	7C	Mango scales	Australia: No current concerns. Codex MRL: 0.02 mg/Kg
SPINETORAM	5	Flower eating caterpillars	Australia: No current concerns. Codex MRL: 0.01 mg/Kg EU: Not approved UK: Withdrawn (2024). Canada: In re-evaluation
SPINOSAD	5	Flower eating caterpillars PER89870 for the control of Fall Armyworm	Australia: No current concerns. Permit PER89870 Expiry date: 31/10/2030 Canada: In re-evaluation
SPIROTETRAMAT	23	Citrus mealybug	Australia: No current concerns. Codex MRL: 0.3 mg/Kg EU: Not approved Canada: In re-evaluation
SULFOXAFLOR	4C	Banana-spotting bug / fruit-spotting bug	Australia: No current concerns. Codex MRL: 0.3 mg/Kg

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TETRANILIPROLE	28	Mango seed weevil PER92133 for the control of Mango shoot looper	Australia: No current concerns. Permit PER92133 Expiry date: 30/06/2030
TRICHLORFON	1B	PER12450 for the control of Fruit fly PER14743 for the control of Flatid Planthopper Flower-eating Caterpillar Loopers Yellow Peach Moth Suppression only: Fruit-spotting Bug, Banana-spotting Bug and Green Vegetable Bug.	Australia: APVMA nominated for reconsideration after 2029. Permit PER12450 Expiry date: 31/08/2030 Permit PER14743 Expiry date: 28/02/2030 EU: Not approved Canada: Cancelled USA: Under Registration Review (scheduled)

FUNGICIDES – Disease Control

Active Constituent	MoA Group	Pest	Risks and Comments
AZOXYSTROBIN	11	Anthracnose Stem-end rot	Australia: No current concerns. Codex MRL: 4 mg/Kg Canada: In re-evaluation
Bacillus amyloliquefaciens STRAIN QST 713	BM02	Anthracnose Stem-end rot	Australia: No current concerns.
CHLOROTHALONIL	M5	PER14830 for the control of Anthracnose	Australia: APVMA reconsideration. Prioritised to be commenced by 2028. Permit PER14830 Expiry date: 31/08/2030 EU: Not approved Canada: In re-evaluation USA: Under Registration Review (scheduled)

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Active Constituent	MoA Group	Pest	Risks and Comments
COPPER	M1	Anthracnose Bacterial black spot PER94006 for the control of Diplodia & pink disease	Australia: No current concerns. Permit PER94006 Expiry date: 31/08/2029
FLUDIOXONIL	12	Anthracnose Dendritic post Stem-end rot	Australia: No current concerns. Codex MRL: 7 mg/Kg EU: Approved, candidate for substitution.
IODINE	М	Bactericide	Australia: No current concerns. Canada: Cancelled
MANCOZEB	M3	Anthracnose	Australia: APVMA reconsideration. Prioritised to be commenced by 2027. EU: Not approved UK: Withdrawn (2024). USA: Under Registration Review (scheduled)
METIRAM	M3	Anthracnose Powdery mildew	Australia: APVMA reconsideration. Prioritised to be commenced by 2027. EU: Not approved Canada: Only approved for foliar applications in potato crops.
PROCHLORAZ	3	Alternaria rot Anthracnose Blossom blight	Australia: No current concerns. Codex MRL: 7 mg/Kg EU: Not approved
PYRACLOSTROBIN FLUXAPYROXAD	11 + 7	Anthracnose Powdery mildew	PYRACLOSTROBIN Australia: No current concerns. Codex MRL: 0.6 mg/Kg Canada: In re-evaluation FLUXAPYROXAD Australia: No current concerns. Codex MRL: 0.6 mg/Kg

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Active Constituent	MoA Group	Pest	Risks and Comments
PYRACLOSTROBIN METIRAM	11 + M3	Anthracnose Powdery mildew Stem-end rot	PYRACLOSTROBIN Australia: No current concerns. Codex MRL: 0.6 mg/Kg Canada: In re-evaluation METIRAM Australia: APVMA reconsideration. Prioritised to be commenced by 2027. EU: Not approved Canada: Only approved for foliar applications in potato crops.
THIRAM	M3	Anthracnose	Australia: APVMA reconsideration. Prioritised to be commenced by 2027. EU: Not approved Canada: Only approved for seed treatment.

HERBICIDES – Weed Control

Active Constituent	MoA Group	Risks and Comments
CARFENTRAZONE-ETHYL	14	Australia: No current concerns. Canada: In re-evaluation
CLETHODIM	1	Australia: No current concerns.
DIQUAT	22	Australia: APVMA: <u>Currently under review.</u> Publication of the final regulatory decision is now expected in Mid 2026 . EU: Not approved USA: No agricultural uses allowed. Aquatic herbicide.
FLUAZIFOP-P	1	Australia: No current concerns

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R4	No current risk/concerns

Active Constituent	MoA Group	Risks and Comments
GLUFOSINATE-AMMONIUM	10	Australia: APVMA Nominated for targeted spray drift reconsideration Codex MRL: 0.1 mg/Kg EU: Not approved Canada: In re-evaluation
GLYPHOSATE	9	Australia: APVMA Nominated for targeted spray drift reconsideration USA: Under Registration Review (scheduled)
HALOXYFOP	1	Australia: No current concerns. EU: Not approved
ISOXABEN	29	Australia: No current concerns.
ORYZALIN	3	Australia: No current concerns. EU: Not approved UK: Withdrawn (2024).
OXYFLUORFEN	14	Australia: No current concerns. EU: Approved, candidate for substitution. UK: Withdrawn (2024). Canada: In re-evaluation USA: Under Registration Review (scheduled)
PARAQUAT	22	Australia: APVMA: <u>Currently under review.</u> Publication of the final regulatory decision is now expected in Mid 2026. Candidate chemical recommended to be listed to Rotterdam Convention. Codex MRL: 0.01 mg/Kg EU: Not approved Canada: Cancelled USA: Restricted use
PENDIMETHALIN	3	Australia: No current concerns. EU: Approved, candidate for substitution. Canada: In re-evaluation USA: Under Registration Review (scheduled)

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R4	No current risk/concerns

FUMIGANTS – Mixed Function

Active Constituent	Use	Risks and Comments
CHLOROPICRIN + 1,3-	Control of soil borne diseases, plant parasitic	CHLOROPICRIN
DICHLOROPROPENE	Nematodes, Symphylans and Wireworms	Australia: No current concerns.
		EU: Not approved
		USA: Restricted use
		1,3-DICHLOROPROPENE
		Australia: No current concerns.
		EU: Pending
		Canada: Cancelled
DAZOMET	Control of bacterial spot (Xanthomonas spp.)	Australia: No current concerns.
	(suppression only).	USA: Under Registration Review (scheduled)
	Soil insects and nematodes	
ETHANEDINITRILE	Soil borne pathogens, nematodes and weeds	Australia: No current concerns.
METHAM PRESENT AS SODIUM	Germinating weeds and soil-borne fungus	Australia: No current concerns.
SALT	diseases	

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R4	No current risk/concerns

PLANT REGULATORS AND OTHERS – Plant regulators, post-harvest treatments, rodenticides and others.

Active Constituent	Use	Risks and Comments
1-METHYLCYCLOPROPENE	Improve post-harvest fruit quality.	Australia: No current concerns
PACLOBUTRAZOL	Reduce vegetative growth.	Australia: No current concerns. EU: Approved, candidate for substitution. Canada: In re-evaluation
ETHEPHON	PER91560 for the control of Dry Season Vegetative Flushes	Australia: No current concerns Permit PER91560 Expiry date: 30/11/2026
DIDECYLDIMETHYLAMMONIUMCHLORIDE	Sanitizer	Australia: No current concerns.

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