

Macadamias

Agrichemical Regulatory Risk Assessment

May 2026

Regulatory pressures on agrichemicals are increasing globally, with many being either restricted or withdrawn from use.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

The use of agrichemicals can also be impacted through differences in standards between trading partners. The lack of an appropriate pesticide maximum residue limit (MRL) in an importing country can, for practical purposes, effectively prohibit use in the exporting country to ensure compliance, as MRL breach would adversely affect market access. This report provides details of CODEX MRLs as a means of highlighting risks for countries that rely on CODEX, however does not include every instance of where an importing country specific MRL is less than the relevant Australian MRL. The Australian Department of Agriculture Fisheries and Forestry provides information directly to grower bodies when MRLs change in other countries.

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 Macadamias 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
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INSECTICIDES/MITICIDES/NEMATICIDES - Insect and other pests

Blue text = new APVMA approved uses

Active Constituent	MoA Group	Pest	Risks and Comments
(S)-METHOPRENE	7A	PER90213 for the control of Red Imported Fire Ant	Australia: No current concerns. Permit PER90213 Expiry date: 30/06/2027
ABAMECTIN	6	PER87510 for the control of Thrips, broad mites, and flat mites	Australia: APVMA nominated for reconsideration and spray drift assessment. Permit PER87510 Expiry date: 28/02/2030 Codex MRL: 0.005 mg/Kg Canada: Re-evaluation finalised. Label amendments to mitigate risks to human health and environment (July, 2025)
ACEPHATE	1B	Banana spotting bug Flower thrips Fruit-spotting bug Macadamia flower caterpillar Macadamia leafminer Macadamia nutborer Red shouldered leaf beetle	Australia: APVMA nominated for reconsideration after 2029. EU: Not approved Canada: In re-evaluation
ACETAMIPRID + PYRIPROXYFEN	4A + 7C	Banana-spotting bug Citrus mealybug Fruit-spotting bug Longtailed mealybug Pink wax scale	ACETAMIPRID Australia: APVMA: Neonicotinoids chemical review has been delayed. The proposed regulatory decision unlikely before 2027. Codex MRL: 0.06 mg/Kg UK: Withdrawn (2033). Canada: In re-evaluation PYRIPROXYFEN Australia: No current concerns. Permit PER87728 Expiry date: 28/02/2027

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BACILLUS THURINGIENSIS	11A	Caterpillars Helicoverpa Painted vine moth Armyworms Light brown apple moth Looper caterpillars	Australia: No current concerns.
BETACYFLUTHRIN	3A	Fruit-spotting bug Macadamia nutborer Yellow peach moth	Australia: No current concerns. EU: Not approved
CARBARYL	1A	Cornelian Macadamia cup moth Macadamia nutborer Macadamia twig-girdler Red shouldered leaf beetle Wingless grasshopper Yellow peach moth	Australia: Codex - being considered for periodic review Codex MRL: 1 mg/Kg EU: Not approved Canada: In re-evaluation
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
FLUPYRADIFURONE	4D	Banana-spotting bug Fruit-spotting bug Macadamia lace bug Scirtothrips	Australia: No current concerns.
ISOCYCLOSERAM	30	Fruit spotting bug Macadamia seed weevil	Australia: No current concerns.
LAMBDA-CYHALOTHRIN	3A	PER12961 for the control of Mediterranean Fruit Fly & Queensland Fruit Fly	Australia: No current concerns. Permit PER12961 Expiry date: 31/03/2030 EU: Approved, candidate for substitution
MALATHION	1B	PER13642 for the control of Australian plague locust	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 PER13642 Expiry date: 30/04/2030 Canada: In re-evaluation

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METALDEHYDE	--	For the control of snails and slugs	Australia: No current concerns Canada: In re-evaluation
METHOXYFENOZIDE	18	Macadamia flower caterpillar Macadamia nutborer	Australia: No current concerns. Codex MRL: 0.1 mg/Kg EU: Not approved Canada: In re-evaluation
PETROLEUM OIL	UN	PER11635 for the control of Macadamia felted coccid	Australia: No current concerns. Permit PER11635 Expiry date: 30/04/2030 EU: Not approved
POTASSIUM SALTS OF FATTY ACIDS	--	Spider mites	Australia: No current concerns.
PYRIPROXYFEN	7C	PER87728 for the control of Red imported fire ants	Australia: No current concerns. Permit PER87728 Expiry date: 28/02/2027
SPINETORAM	5	Macadamia nutborer Macadamia twig-girdler Yellow peach moth	Australia: No current concerns. Codex MRL: 0.01 mg/Kg EU: Not approved Canada: In re-evaluation
SPINOSAD	5	PER80719 and PER93557 for the control of Mediterranean Fruit Fly and Queensland Fruit Fly	Australia: No current concerns. Permit PER80719 Expiry date: 31/03/2028 Permit PER93557 Expiry date: 30/04/2028 Codex MRL: 0.07 mg/Kg Canada: In re-evaluation
SULFOXAFLOR	4C	Aphids Banana-spotting bug Black citrus aphid Fruit-spotting bug	Australia: No current concerns. Codex MRL: 0.03 mg/Kg
TEBUFENOZIDE	18	Macadamia flower caterpillar Macadamia nutborer	Australia: No current concerns.
TETRANILIPROLE	28	Sigastus weevil / macadamia seed weevil	Australia: No current concerns. Codex MRL: 0.03 mg/Kg
TRICHLORFON	1B	Macadamia flower caterpillar PER13689 for the control of Fruit-spotting bug banana bug, green vegetable bug	Australia: APVMA nominated for reconsideration after 2029. Permit PER13689 Expiry date: 28/02/2027 EU: Not approved Canada: Cancelled

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FUNGICIDES – Disease Control

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Active Constituent	MoA Group	Pest	Risks and Comments
AZOXYSTROBIN + TEBUCONAZOLE	11 + 3	Husk spot	<p>AZOXYSTROBIN Australia: No current concerns. Codex MRL: 0.01 mg/Kg UK: Withdrawn (2029). Canada: In re-evaluation</p> <p>TEBUCONAZOLE Australia: APVMA: Removed from nomination list - maintain watching brief Codex MRL: 0.05 mg/Kg EU: Approved, candidate for substitution Canada: In re-evaluation USA: Under Registration Review (scheduled)</p>
CARBENDAZIM	1	Husk spot	<p>Australia: Nominated for targeted spray drift reconsideration EU: Not approved Canada: Cancelled</p>
COPPER	M1	Anthracnose Husk spot Phomopsis husk rot & canker Phytophthora root rot Phytophthora stem rot	<p>Australia: No current concerns.</p>
DIFENOCONAZOLE	3	Husk spot	<p>Australia: APVMA nominated for reconsideration after 2029. Codex MRL: 0.03 mg/Kg EU: Approved, candidate for substitution Canada: In re-evaluation</p>

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FLUOPYRAM + TEBUCONAZOLE	7 + 3	Husk spot Botrytis blight	<p>FLUOPYRAM Australia: No current concerns. Codex MRL: 0.04 mg/Kg</p> <p>TEBUCONAZOLE Australia: APVMA: Removed from nomination list - maintain watching brief Codex MRL: 0.05 mg/Kg EU: Approved, candidate for substitution Canada: In re-evaluation USA: Under Registration Review (scheduled)</p>
IPIRODIONE	2	Botrytis blight Raceme blight (grey mould)	<p>Australia: No current concerns. EU: Not approved USA: Under Registration Review (scheduled)</p>
MEFENTRIFLUCONAZOLE	3	Husk spot	<p>Australia: No current concerns. Codex MRL: 0.06 mg/Kg Canada: In re-evaluation</p>
METALAXYL	4	Trunk (stem) canker	<p>Australia: No current concerns. EU: Approved, candidate for substitution Canada: In re-evaluation</p>
PENTHIOPYRAD	7	Husk spot	<p>Australia: No current concerns. Codex MRL: 0.05 mg/Kg EU: Not approved</p>
PYRACLOSTROBIN	11	Husk spot	<p>Australia: No current concerns. Codex MRL: 0.02 mg/Kg Canada: In re-evaluation</p>
PYRACLOSTROBIN + FLUXAPYROXAD	11 + 7	Husk spot	<p>PYRACLOSTROBIN Australia: No current concerns. Codex MRL: 0.02 mg/Kg Canada: In re-evaluation</p> <p>FLUXAPYROXAD Australia: No current concerns. Codex MRL: 0.04 mg/Kg</p>

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HERBICIDES - Weed Control

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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
FLUMIOXAZIN	14	Australia: No current concerns. Codex MRL: 0.02 mg/Kg Canada: In re-evaluation
GLUFOSINATE-AMMONIUM	10	Australia: Nominated for targeted spray drift reconsideration EU: Not approved Canada: In re-evaluation
GLYPHOSATE	9	Australia: 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
OXYFLUORFEN	14	Australia: No current concerns. EU: Approved, candidate for substitution Canada: In re-evaluation USA: Under Registration Review (scheduled)
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

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PENDIMETHALIN	3	<p>Australia: No current concerns. Codex MRL: 0.05 mg/Kg EU: Approved, candidate for substitution Canada: In re-evaluation USA: Under Registration Review (scheduled)</p>
TRIFLURALIN	3	<p>Australia: No current concerns. EU: Not approved Canada: In re-evaluation USA: Under Registration Review (scheduled)</p>

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FUMIGANTS

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1,3-DICHLOROPROPENE	Control of soil borne diseases, plant parasitic Nematodes, Symphylans and Wireworms	Australia: No current concerns. EU: Pending Canada: Cancelled
CHLOROPICRIN	Control of soil borne diseases, plant parasitic Nematodes, Symphylans and Wireworms	Australia: No current concerns. EU: Not approved USA: Restricted use
CHLOROPICRIN + 1,3-DICHLOROPROPENE	Control of soil borne diseases, plant parasitic Nematodes, Symphylans and Wireworms	CHLOROPICRIN Australia: No current concerns. EU: Not approved USA: Restricted use 1,3-DICHLOROPROPENE Australia: No current concerns. EU: Pending Canada: Cancelled
ETHANEDINITRILE	Soil borne pathogens, nematodes and weeds	Australia: No current concerns.
METHAM PRESENT AS SODIUM SALT	Germinating weeds and soil-borne fungus diseases	Australia: No current concerns.

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PLANT GROWTH REGULATORS AND OTHERS

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Active Constituent	Use	Risks and Comments
COUMATETRALYL	Control of rats	Australia: APVMA: Currently under Anticoagulant rodenticides chemical review EU: Not approved
ETHEPHON	PER11462 for use as promoter of nutfall	Australia: No current concerns Permit PER11462 Expiry date: 31/05/2030
ZINC PHOSPHIDE	Control of rats and mice	Canada: In re-evaluation USA: Upcoming

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Funding statement: MT24008 –Regulatory Support & Response Co-ordination. This multi-industry project has been funded by Hort Innovation, using industry research and development levies and contributions from the Australian Government. Hort Innovation is the grower-owned, not-for-profit research and development corporation for Australian horticulture.

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