

Onion

Agrichemical Regulatory Risk Assessment

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Regulatory pressures on agrichemicals are increasing globally, with many being either restricted or withdrawn from use.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 onion crops 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
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INSECTICIDES/MITICIDES/NEMATOCIDES - Insect and other pests

Blue text = new APVMA approved uses

Active Constituent	MoA Group	Pest	Risks and Comments
ALPHA-CYPERMETHRIN	3A	Permit PER80282 for the control of Onion thrips	Australia: APVMA nominated for reconsideration after 2029 . Permit PER80282 Expiry date: 31/08/2030 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)
CYANTRANILIPROLE	28	Onion thrips (suppression only)	Australia: No current concerns. Codex MRL: 0.05 mg/Kg
DAZOMET	8F	Non cyst forming nematodes	Australia: No current concerns. USA: Under Registration Review (scheduled)
DIAZINON	1B	--	Australia: APVMA made a Final Decision on 2024 . After 10 September 2025, crop uses are no longer approved. Codex: All MRLs deleted EU: Not approved Canada: Cancelled USA: Under Registration Review (scheduled)

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Active Constituent	MoA Group	Pest	Risks and Comments
DIMETHOATE	1B	Aphids Bugs Green vegetable bug Jassids Leafhoppers Leafminer flies Mites Redlegged earth mite Thrips Wingless grasshopper	Australia: APVMA reconsideration. Prioritised to be commenced by 2029. EU: Not approved Canada: In re-evaluation USA: Under Registration Review (scheduled)
ETHYL FORMATE	8A	Onion (Cotton seedling) thrips	Australia: No current concerns. EU: Not approved
FLONICAMID	29	PER89185 for the control of Suppression only of: Onion Thrips and Western Flower Thrips	Australia: No current concerns. Permit PER89185 Expiry date: 31/05/2027
ISOCYCLOSERAM	30	Onion thrips Plague thrips	Australia: No current concerns. Codex MRL: 0.01 mg/Kg
LAMBDA-CYHALOTHRIN	3A	Onion (Cotton seedling) thrips	Australia: No current concerns. Codex MRL: 0.2 mg/Kg EU: Approved, candidate for substitution.
MALATHION	1B	Australian plague locust Migratory locust Onion (Cotton seedling) thrips Spur-throated 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. Codex MRL: 1 mg/Kg UK: Withdrawn (2025). Canada: In re-evaluation USA: Under Registration Review (scheduled)
OMETHOATE	1B	Thrips Lucerne flea	Australia: No current concerns. EU: Not approved

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Active Constituent	MoA Group	Pest	Risks and Comments
ORANGE OIL	--	Suppression: Onion thrips (<i>Thrips tabaci</i>)	Australia: No current concerns.
PETROLEUM OIL	UN	PER12221 for the control of Aphids Green mirid Green vegetable bug Grey cluster bug Leafhoppers Mites Rutherglen bug Thrips	Australia: No current concerns. Permit PER12221 Expiry date: 30/09/2027 EU: Not approved
PHORATE	1B	Onion seedling maggot Thrips	Australia: APVMA reconsideration. Prioritised to be commenced by 2026. EU: Not approved Canada: In re-evaluation USA: Under Registration Review (scheduled)
SPINETORAM	5	Onion thrips Western flower thrips	Australia: No current concerns. Codex MRL: 0.01 mg/Kg EU: Not approved UK: Withdrawn (2024). Canada: In re-evaluation
SPIROTETRAMAT	23	Onion (Cotton seedling) thrips Plague thrips Tomato thrips Western flower thrips	Australia: No current concerns. Codex MRL: 0.4 mg/Kg EU: Not approved Canada: In re-evaluation

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FUNGICIDES – Disease Control

Active Constituent	MoA Group	Pest	Risks and Comments
AZOXYSTROBIN	11	Blue mould Downy mildew Purple blotch	Australia: No current concerns. Codex MRL: 10 mg/Kg Canada: In re-evaluation
AZOXYSTROBIN OXATHIPIPROLIN	11 + 49	Downy mildew White rot	AZOXYSTROBIN Australia: No current concerns. Codex MRL: 10 mg/Kg Canada: In re-evaluation OXATHIPIPROLIN Australia: No current concerns. Codex MRL: 0.04 mg/Kg
BOSCALID	7	Neck rot	Australia: No current concerns. Codex MRL: 5 mg/Kg Canada: In re-evaluation
CHLOROTHALONIL	M5	Downy mildew Neck and bulb rot Permit PER94740 for the control of Botrytis neck-rot	Australia: APVMA reconsideration. Prioritised to be commenced by 2028. Permit PER94740 Expiry date: 30/04/2029 Codex MRL: 1.5 mg/Kg EU: Not approved Canada: In re-evaluation USA: Under Registration Review (scheduled)
COPPER	M1	Downy mildew Purple blotch	Australia: No current concerns.
DIMETHOMORPH	40	Downy mildew Purple blotch	Australia: No current concerns. Codex MRL: 0.6 mg/Kg EU: Not approved Canada: In re-evaluation

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Active Constituent	MoA Group	Pest	Risks and Comments
DIMETHOMORPH AMETOCTRADIN	45 + 40	Downy mildew	<p>DIMETHOMORPH Australia: No current concerns. Codex MRL: 0.6 mg/Kg EU: Not approved Canada: In re-evaluation</p> <p>AMETOCTRADIN Australia: No current concerns. Codex MRL: 1.5 mg/Kg</p>
FLUDIOXONIL CYPRODINIL	12 + 9	Black mould Grey mould Neck and bulb rot	Australia: No current concerns.
FLUOPYRAM TEBUCONAZOLE	3 + 7	White rot - Suppression only	Australia: No current concerns.
FLUXAPYROXAD	7	Permit PER94835 for the control of Neck rot	<p>Australia: No current concerns. Permit PER94835 Expiry date: 31/05/2026 Codex MRL: 0.6 mg/Kg</p>
HYDROGEN PEROXIDE PEROXYACETIC ACID	M	Downy mildew Neck and bulb rot	Australia: No current concerns.
IODINE	M	Bactericide Fungi (Post-harvest)	<p>Australia: No current concerns. Canada: Cancelled</p>
IPRODIONE	2	Permit PER94740 for the control of Botrytis neck-rot	<p>Australia: No current concerns. Permit PER94740 Expiry date: 30/04/2029 Codex MRL: 0.15 mg/Kg EU: Not approved USA: Under Registration Review (scheduled)</p>

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Active Constituent	MoA Group	Pest	Risks and Comments
MANCOZEB	M3	Downy mildew Purple blotch	Australia: APVMA reconsideration. Prioritised to be commenced by 2027. EU: Not approved UK: Withdrawn (2024). USA: Under Registration Review (scheduled)
MANCOZEB DIMETHOMORPH	M3 + 40	Downy Mildew	MANCOZEB Australia: APVMA reconsideration. Prioritised to be commenced by 2027. DIMETHOMORPH Australia: No current concerns. Codex MRL: 0.6 mg/Kg EU: Not approved Canada: In re-evaluation
MANCOZEB METALAXYL	M3 + 4	Downy Mildew Purple Blotch	MANCOZEB Australia: APVMA reconsideration. Prioritised to be commenced by 2027. METALAXYL Australia: No current concerns. Codex MRL: 0.03 mg/Kg EU: Approved, candidate for substitution. Canada: In re-evaluation
MANDESTROBIN	11	White rot Downy mildew - suppression	Australia: No current concerns.
METALAXYL	4	Downy mildew Purple blotch	Australia: No current concerns. Codex MRL: 0.03 mg/Kg EU: Approved, candidate for substitution. Canada: In re-evaluation
METIRAM	M3	Downy mildew Purple blotch	Australia: APVMA reconsideration. Prioritised to be commenced by 2027. EU: Not approved Canada: Only approved for foliar applications in potato crops.

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ORANGE OIL	--	Downy mildew (<i>Peronospora destructor</i>) Suppression only	Australia: No current concerns.
OXADIXYL	4	Downy mildew	Australia: No current concerns. EU: Not approved
OXATHIPIPROLIN	49	Downy mildew	Australia: No current concerns. Codex MRL: 0.04 mg/Kg
PENTHIOPYRAD	7	Botrytis blight Purple blotch	Australia: No current concerns. Codex MRL: 0.7 mg/Kg
PHOSPHOROUS (PHOSPHONIC) ACID	P07 (33)	Permit PER13698 for the suppression of Downy mildew	Australia: No current concerns. Permit PER13698 Expiry date: 31/07/2030
PROCYMIDONE	2	White rot	Australia: No current concerns. EU: Not approved
PROPAMOCARB HYDROCHLORIDE FLUOPICOLIDE	28 + 43	Downy mildew	Australia: No current concerns.
PROPINEB	M3	Downy mildew	Australia: APVMA reconsideration. Prioritised to be commenced by 2027. EU: Not approved
PROPINEB OXADIXYL	M3 + 4	Downy mildew	PROPINEB Australia: APVMA reconsideration. Prioritised to be commenced by 2027. EU: Not approved OXADIXYL Australia: No current concerns. EU: Not approved

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TEBUCONAZOLE	3	White rot	Australia: APVMA: Removed from nomination list - maintain watching brief Codex MRL: 0.15 mg/Kg EU: Approved, candidate for substitution. Canada: In re-evaluation USA: Under Registration Review (scheduled)
TRIADIMENOL	3	White rot	Australia: APVMA nominated for reconsideration after 2029. EU: Not approved Canada: Cancelled
ZINEB	M3	Blue mould Downy mildew Purple blotch	Australia: APVMA reconsideration. Prioritised to be commenced by 2027. EU: Not approved Canada: Cancelled

HERBICIDES – Weed Control

Active Constituent	MoA Group	Risks and Comments
ASULAM	18	Australia: No current concerns EU: Not approved Canada: Cancelled
BENTAZONE	6	Australia: No current concerns. Permit PER14773 Expiry date: 30/11/2027 Codex MRL: 0.04 mg/Kg
BROMOXYNIL	6	Australia: APVMA nominated for reconsideration and spray drift assessment. EU: Not approved Canada: In re-evaluation

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CHLORTHAL DIMETHYL	3	Australia: APVMA cancelled all products containing chlorthal dimethyl in October 2024. The use of chlorthal dimethyl as an agricultural chemical product is now illegal. EU: Not approved Canada: Cancelled
CLETHODIM	1	Australia: No current concerns. Codex MRL: 0.5 mg/Kg
CYANAZINE	5	Australia: APVMA nominated for reconsideration after 2029. EU: Not approved Canada: Cancelled
DIMETHENAMID-P	15	Australia: No current concerns. Permit PER89991 Expiry date: 31/01/2027 Codex MRL: 0.01 mg/Kg Canada: In re-evaluation
DIQUAT	22	Australia: APVMA: Currently under review. Publication of the final regulatory decision is now expected in Mid 2026. EU: Not approved
ETHOFUMESATE	15	Australia: No current concerns. Permit PER84808 Expiry date: 31/12/2027 Canada: In re-evaluation
FLUAZIFOP-P PRESENT AS THE BUTYL ESTER	1	Australia: APVMA Nominated for targeted spray drift reconsideration Canada: Cancelled
FLUROXYPYR	4	Australia: APVMA Nominated for targeted spray drift reconsideration Permit PER87200 Expiry date: 31/08/2028
GLYPHOSATE	9	Australia: APVMA Nominated for targeted spray drift reconsideration
HALOXYFOP	1	Australia: No current concerns. Permit PER84734 Expiry date: 30/09/2029 Codex MRL: 0.2 mg/Kg EU: Not approved

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IOXYNIL	5	Australia: No current concerns. EU: Not approved
LINURON	5	Australia: No current concerns. EU: Not approved
METHABENZTHIAZURON	5	Australia: No current concerns. EU: Not approved
OXYFLUORFEN	14	Australia: No current concerns. EU: Approved, candidate for substitution. UK: Withdrawn (2024). Canada: In re-evaluation
PARAQUAT	22	Australia: APVMA: Currently under review Publication of the final regulatory decision is now expected in Mid 2026. Candidate chemical recommended to be listed to Rotterdam Convention. EU: Not approved Canada: Cancelled USA: Restricted use
PENDIMETHALIN	3	Australia: No current concerns. Codex MRL: 0.05 mg/Kg EU: Approved, candidate for substitution. Canada: In re-evaluation
PROPACHLOR	15	Australia: No current concerns. EU: Not approved
QUIZALOFOP-P-ETHYL	1	Australia: No current concerns.
SETHOXYDIM	1	Australia: No current concerns. EU: Not approved Canada: Phase-Out

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FUMIGANTS – Mixed Function

Active Constituent	Use	Risks and Comments
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
DAZOMET	Control of bacterial spot (<i>Xanthomonas</i> 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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PLANT REGULATORS AND OTHERS – Plant regulators, post-harvest treatments, rodenticides and others.

Active Constituent	Use	Risks and Comments
MALEIC HYDRAZIDE	For the control of premature sprouting of onion bulbs.	Australia: No current concerns. Codex MRL: 15 mg/Kg Canada: In re-evaluation

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