

Onion

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Regulatory pressures on agrichemicals are increasing globally, with many being either restricted or withdrawn from use.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

Blue text = new APVMA approved uses

Active Constituent	MoA Group	Pest	Risks and Comments
ABAMECTIN	6	PER96481 for the control of Leaf miners	Australia: APVMA nominated for reconsideration and spray drift assessment . Permit PER96481 Expiry date: 31/07/2028 Codex MRL: 0.005 mg/Kg Canada: Re-evaluation finalised. Label amendments to mitigate risks to human health and environment (July, 2025)
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
CHLOROPICRIN + 1,3-DICHLOROPROPENE	8B	Cyst forming nematodes Symphylids Wireworm	CHLOROPICRIN Australia: No current concerns. EU: Not approved 1,3-DICHLOROPROPENE Australia: No current concerns.
CYANTRANILIPROLE	28	Onion thrips (suppression only)	Australia: No current concerns. Codex MRL: 0.05 mg/Kg
DIAZINON	1B	Onion seedling maggot Wireworm	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
DIMETHOATE	1B	Aphids Bugs Green vegetable bug Jassids Leafhoppers Leafminer flies Mites Redlegged earth mite Thrips Wingless grasshopper	Australia: APVMA: Chemical Review prioritised to be commenced by 2029 . EU: Not approved Canada: In re-evaluation
ETHYL FORMATE	8A	Onion (Cotton seedling) thrips	Australia: No current concerns. EU: Not approved

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

FIPRONIL	2B	European Wasp	Australia: APVMA: Proposed Regulatory decision was expected by April 2026. APVMA is now advising the by end of 2026 at the earliest. Permit PER89402 Expiry date: 30/04/2027 Codex MRL: 0.03 mg/Kg 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
IRON EDTA COMPLEX	--	Common brown(brown) snail White snail Vine snail	Australia: No current concerns
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. 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 Canada: In re-evaluation
METALDEHYDE	--	For the control of snails and slugs	Australia: No current concerns
OMETHOATE	1B	Thrips Lucerne flea	Australia: No current concerns. EU: Not approved
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. Was to start 2026. APVMA to publish a new Chemical Review priority list by mid 2026 EU: Not approved Canada: In re-evaluation
SPINETORAM	5	Onion thrips Western flower thrips	Australia: No current concerns. Codex MRL: 0.01 mg/Kg EU: Not approved 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

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

FUNGICIDES – Disease Control

Blue text = new APVMA approved uses

Active Constituent	MoA Group	Pest	Risks and Comments
AZOXYSTROBIN	11	Blue mould Downy mildew Purple blotch	Australia: No current concerns. Permit PER93402 Expiry date: 31/05/2027 Codex MRL: 10 mg/Kg UK: Withdrawn (2029). Canada: In re-evaluation
AZOXYSTROBIN DIFENOCONAZOLE	11	PER93402 for the control of Powdery Mildew	AZOXYSTROBIN Australia: No current concerns. Permit PER93402 Expiry date: 31/05/2027 Codex MRL: 10 mg/Kg UK: Withdrawn (2029). Canada: In re-evaluation DIFENOCONAZOLE Australia: No current concerns.
AZOXYSTROBIN OXATHIPIPROLIN	11 + 49	Downy mildew White rot	AZOXYSTROBIN Australia: No current concerns. Permit PER93402 Expiry date: 31/05/2027 Codex MRL: 10 mg/Kg UK: Withdrawn (2029). 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. Codex MRL: 1.5 mg/Kg EU: Not approved Canada: In re-evaluation USA: Under Registration Review (scheduled) Permit PER94740 Expiry date: 31/05/2027

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

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
DIMETHOMORPH AMETOCTRADIN	40	Downy mildew	DIMETHOMORPH Australia: No current concerns. Codex MRL: 0.6 mg/Kg EU: Not approved Canada: In re-evaluation AMETOCTRADIN Australia: No current concerns Codex MRL: 1.5 mg/Kg UK: Withdrawn (2031).
FLUDIOXONIL CYPRODINIL	12 + 9	Black mould Grey mould Neck and bulb rot	FLUDIOXONIL Australia: No current concerns. EU: Approved, candidate for substitution CYPRODINIL Australia: No current concerns. Codex MRL: 0.3 mg/Kg EU: Approved, candidate for substitution Canada: In re-evaluation
FLUOPYRAM TEBUCONAZOLE	3 + 7	White rot - Suppression only	FLUOPYRAM Australia: No current concerns. Codex MRL: 0.07 mg/Kg TEBUCONAZOLE 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)
FLUXAPYROXAD	7	Permit PER94835 for the control of Neck rot	Australia: No current concerns. Permit PER94835 Expiry date: 31/05/2027 Codex MRL: 0.6 mg/Kg

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

HYDROGEN PEROXIDE PEROXYACETIC ACID	M	Downy mildew Neck and bulb rot	HYDROGEN PEROXIDE Australia: No current concerns. PEROXYACETIC ACID Australia: No current concerns.
IODINE	M	Bactericide Fungi (Post-harvest)	Australia: No current concerns. Canada: Cancelled
IPRODIONE	2	Permit PER94740 for the control of Botrytis neck-rot	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)
MANCOZEB	M3	Downy mildew Purple blotch	Australia: APVMA reconsideration. Prioritised to be commenced by 2027. EU: Not approved USA: Under Registration Review (scheduled)
MANCOZEB DIMETHOMORPH	M3 + 40	Downy Mildew	MANCOZEB Australia: APVMA reconsideration. Prioritised to be commenced by 2027. EU: Not approved USA: Under Registration Review (scheduled) 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. EU: Not approved USA: Under Registration Review (scheduled) 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.

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

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.
OXADIXYL	4	Downy mildew	Australia: No current concerns. EU: Not approved
OXATHIAPROLIN	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 EU: Not approved
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	43	Downy mildew	PROPAMOCARB HYDROCHLORIDE Australia: No current concerns. FLUOPICOLIDE Australia: No current concerns Codex MRL: 1 mg/Kg EU: Approved, candidate for substitution
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
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)

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

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

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

HERBICIDES – Weed Control

Blue text = new APVMA approved uses

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 UK: Withdrawn (2031).
BROMOXYNIL	6	Australia: APVMA nominated for reconsideration and spray drift assessment. EU: Not approved Canada: In re-evaluation
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 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: Nominated for targeted spray drift reconsideration Canada: Cancelled
FLUROXYPYR	4	Australia: Nominated for targeted spray drift reconsideration Permit PER87200 Expiry date: 31/08/2028

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

GLYPHOSATE	9	Australia: Nominated for targeted spray drift reconsideration USA: Under Registration Review (scheduled)
HALOXYFOP	1	Australia: No current concerns. Permit PER84734 Expiry date: 30/09/2029 Codex MRL: 0.2 mg/Kg EU: Not approved
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 Canada: In re-evaluation USA: Under Registration Review (scheduled)
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 USA: Under Registration Review (scheduled)
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

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

FUMIGANTS

Blue text = new APVMA approved uses

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
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.
METHYL BROMIDE	Disinfestation treatment of commodities	Australia: APVMA nominated for reconsideration after 2029. Permit PER96144 Expiry date: 31/01/2031 EU: Not approved Canada: Remaining pre-plant soil fumigation uses were cancelled (June 2025) USA: Restricted use

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

PLANT GROWTH REGULATORS AND OTHERS

Blue text = new APVMA approved uses

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

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

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.*

Disclaimer

Horticulture Innovation Australia Limited (Hort Innovation) makes no representations and expressly disclaims all warranties (to the extent permitted by law) about the accuracy, completeness, or currency of information in MT24008 – Regulatory Support & Response Co-ordination. Reliance on any information provided by Hort Innovation is entirely at your own risk. Hort Innovation is not responsible for, and will not be liable for, any loss, damage, claim, expense, cost (including legal costs) or other liability arising in any way, including from any Hort Innovation or other person’s negligence or otherwise from your use or non-use of MT24008 – Regulatory Support & Response Co-ordination, or from reliance on information contained in the material or that Hort Innovation provides to you by any other means.

Legal notice

Copyright © Horticulture Innovation Australia Limited 2026

Copyright subsists in Ag-Chemical Update. Horticulture Innovation Australia Limited (Hort Innovation) owns the copyright, other than as permitted under the Copyright ACT 1968 (Cth). The Ag-Chemical Update (in part or as a whole) cannot be reproduced, published, communicated or adapted without the prior written consent of Hort Innovation. Any request or enquiry to use the Ag-Chemical Update should be addressed to:

Communications Manager
 Hort Innovation
 Level 7, 141 Walker Street
 North Sydney NSW 2060
 Australia

Email: communications@horticulture.com.au

Phone: 02 8295 2300