

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Regulatory pressures on agrichemicals are increasing globally, with many being either restricted or withdrawn from use.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 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 **Leafy lettuce** in Australia as well as assisting with any current initiatives aimed at identifying and addressing pest management deficiencies. Lettuce (head) Regulatory Risk Assessment can be found in a separate document, as the minor use permits and Codex MRLs are different from those for Leafy lettuce.

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

INSECTICIDES/MITICIDES - Insect and other Pests Control

Active Constituent	MoA Group	Pest	Risks and Comments
ABAMECTIN	6	Western flower thrips	Australia: APVMA nominated for reconsideration and spray drift assessment. EU: Approved Canada: In review
AFIDOPYROPEN	9D	Cabbage aphid Cotton aphid Currant lettuce aphid Green peach aphid Silverleaf whiteflies	Australia: No current concerns. EU: Not approved UK: No registrations Canada: No current review USA: Approved
ALPHA-CYPERMETHRIN	3A	Helicoverpa Permit PER13301 for the control of Redlegged earth mite and Vegetable weevil.	Australia: APVMA nominated for reconsideration after 2029 Permit PER13301 Expiry date: 28/02/2030 EU: Not approved Canada: No current review
Bacillus thuringiensis	11A	Helicoverpa Armyworm Diamondback (Cabbage) moth Loopers Soybean looper Permit PER14694 for the control of Fungus Gnats (Sciaridae spp.)	Australia: No current concerns. EU: Approved USA: Review upcoming
BIFENAZATE	20D	Permit PER14210 for the control of Two-Spotted Mite	Australia: No current concerns. Permit PER14210 Expiry date: 31/10/2026 EU: Approved, UK: Approved Canada: In review

Active Constituent	MoA Group	Pest	Risks and Comments
BUPROFEZIN	16	Permit PER82467 for the control of Jassids, leafhoppers, Greenhouse whitefly	Australia: No current concerns. Permit per82467 Expiry date: 31/03/2030 EU: Approved UK: Approved Canada: No current review
CANOLA OIL PYRETHRINS		Aphids Thrips Caterpillars Whitefly Ants Leafhopper Two-spotted mite	CANOLA OIL Australia: No current concerns. PYRETHRINS Australia: No current concerns. EU: Approved UK: Approved Canada: No current review
CARBARYL	1A	Vegetable weevil	Australia: No current concerns. EU: Not approved Canada: In review, USA: Review upcoming
CHLORANTRANILIPROLE	28	Helicoverpa spp.	Australia: No current concerns. Codex MRL: 20 mg/Kg EU: Approved, UK: Approved Canada: In review
CHLORANTRANILIPROLE THIAMETHOXAM	28 + 4A	Brown sowthistle aphid Cluster caterpillar Currant lettuce aphid Green peach aphid Helicoverpa Loopers Lucerne leafroller Silverleaf whiteflies Vegetable leafhopper Western flower thrips. Permit PER94452 for the control of Leaf miners	Permit PER94452 Expiry date: 30/06/2026 CHLORANTRANILIPROLE Australia: No current concerns. Codex MRL: 20 mg/Kg EU: Approved UK: Approved Canada: In review THIAMETHOXAM Australia: APVMA: Currently under review. Proposed regulatory decisions expected between Dec. 2025 to Oct. 2026. Codex MRL: 3 mg/Kg EU: Not approved Canada: In review USA: Review upcoming

Active Constituent	MoA Group	Pest	Risks and Comments
CHLORPYRIFOS	18	Blue oat mite Redlegged earth mite Vegetable weevil	Australia: The APVMA issued a final Decision in September 2024. Leafy lettuce uses were cancelled. Products with previously approved labels must not be possessed or used after September 30, 2025. Codex: All MRLs deleted EU: Not approved Canada: All uses cancelled 2023 USA: Upcoming review
DIAZINON	18	Cutworms	Australia: APVMA made a <u>final Decision on 10 September 2024</u> . Agricultural uses were not supported during the review. Approved use on all vegetables ceases 10 September 2025. Codex: All MRLs deleted EU: Not approved Canada: No current review USA: Review upcoming
EMAMECTIN	6	Cluster caterpillar Cucumber moth Helicoverpa	Australia: APVMA nominated for reconsideration and for targeted spray drift reconsideration. Codex MRL: 0.7 mg/Kg EU: Approved, candidate for substitution. UK: Withdrawn. Expiry date: 30/11/2024 Canada: No current review
EMULSIFIABLE BOTANICAL OILS		Permit PER14077 for the control of Silverleaf whitefly	Australia: No current concerns. Permit PER14077 Expiry date: 31/07/2028
FENITROTHION	18	Australian plague locust Migratory locust Small plague locust Spur-throated locust Wingless grasshopper	APVMA: Under review. Crop uses proposed to be cancelled. APVMA Final decision expected in late 2025. EU: Not approved Canada: No current review
FIPRONIL	2В	Permit PER83203 for the control of western flower thrips and onion thrips.	Australia: APVMA: Currently under review. Proposed Regulatory decision expected by April 2026. Permit PER83203 Expiry date: 30/09/2026 EU: Not approved USA: Review upcoming

Active Constituent	MoA Group	Pest	Risks and Comments
FLUBENDIAMIDE	28	Helicoverpa	Australia: No current concerns. Codex MRL: 7 mg/Kg EU: Not approved UK: Withdrawn. Expiry date: 30/11/2024 Canada: No current review USA: No registrations
HELICOVERPA ARMIGERA NPV	31	Helicoverpa	Australia: No current concerns. EU: Approved
IMIDACLOPRID	4A	Currant lettuce aphid Permit PER10918 for the control of Greenhouse whitefly and aphids. Permit PER12351 for the control of Silverleaf Whitefly.	Australia: APVMA: Currently under review. Proposed regulatory decisions expected between Dec. 2025 to Oct. 2026. Permit PER10918 Expiry date: 31/10/2026 Permit PER12351 Expiry date: 30/04/2026 EU: Not approved Canada: Field uses cancelled or amended USA: Re-registration with risk mitigation measures. Review upcoming
INDOXACARB	22A	Helicoverpa	Australia: No current concerns. Codex MRL: 3 mg/Kg EU: Not approved UK: Withdrawn. Expiry date: 31/08/2024 Canada: No registrations.
ISOCYCLOSERAM	30	Permit PER94552 and permit PER94854 for the control of Serpentine leafminer	Australia: No current concerns. Permit PER94552 Expiry date: 30/11/2027 and Permit PER94854 Expiry date: 31/08/2025 Canada: No current review
MALATHION	1B	28-spotted potato ladybird Aphids Australian plague locust Diamondback (Cabbage) moth Green vegetable bug Redlegged earth mite Rutherglen bug Thrips	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. EU: Approved UK: Withdrawn. Expiry date: 30/04/2025 Canada: In review USA: Review upcoming Codex: No MRLs

Active Constituent	MoA Group	Pest	Risks and Comments
METHOMYL	1A	Cluster caterpillar Helicoverpa	Australia: APVMA reconsideration. Prioritised to be commenced by 2026. Codex MRL: 0.2 mg/Kg EU: Not approved Canada: In review USA: Review upcoming
PERMETHRIN	3A	Cluster caterpillar	Australia: APVMA nominated for reconsideration after 2029. EU: Not approved Canada: No current review
PETROLEUM OIL	UN	Permit 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.
PIRIMICARB	1A	Aphids	Australia: No current concerns. Codex MRL: 5 mg/Kg EU: Approved, candidate for substitution. UK: Approved Canada: No current review USA: No registrations
POTASSIUM SALTS OF FATTY ACIDS		Permit PER13920 for the control of Glasshouse whitefly and Silverleaf whitefly	Australia: No current concerns. Permit PER13920 Expiry date: 31/12/2027 Canada: In review

Active Constituent	MoA Group	Pest	Risks and Comments
PYMETROZINE	9B	Brown sowthistle aphid Cotton aphid Currant lettuce aphid Green peach aphid Potato aphid Silverleaf whiteflies	Australia: APVMA nominated for reconsideration and spray drift assessment EU: Not approved Canada: No current review
PYRETHRINS	3A	Ants Cabbage aphid Diamondback (Cabbage) moth Earwig Greenhouse whitefly Helicoverpa Jassids/Leafhoppers Plague thrips Rose aphid Rutherglen bug Thrips Two-spotted (Red spider) mite Whitefly	Australia: No current concerns. EU: Approved UK: Approved Canada: No current review
PYRIPROXYFEN	7C	Silverleaf whiteflies	Australia: No current concerns. EU: Approved UK: Approved Canada: No current review
SPINETORAM	5	Helicoverpa Loopers Western flower thrips Caterpillars	Australia: No current concerns. Codex MRL: 10 mg/Kg EU: Not approved UK: Withdrawn. Expiry date: 30/09/2024 Canada: In review

Active Constituent	MoA Group	Pest	Risks and Comments
SPINOSAD	5	Helicoverpa Loopers Western flower thrips Permit PER89870 for the control of Fall Armyworm	Australia: Reviewed in 2014. No current concerns. Permit PER89870 Expiry date: 31/07/2025 Codex MRL: 10 mg/Kg EU: Approved UK: Approved Canada: In review
SPIROTETRAMAT	23	Brown sowthistle aphid Currant lettuce aphid Green peach aphid Silverleaf whiteflies Permit PER88640 for the control of Liriomyza leafminers	Australia: No current concerns. Permit PER88640 Expiry date: 28/02/2026 Codex MRL: 7 mg/Kg EU: Not approved UK: Approved Canada: In review
Spodoptera frugiperda NPV		Fall armyworm	Australia: No current concerns. Permit PER90820 Expiry date: 31/03/2027
SULFOXAFLOR	4C	Brown sowthistle aphid Green peach aphid Greenhouse whitefly	Australia: No current concerns. Codex MRL: 6 mg/Kg EU: Approved UK: Approved Canada: No current review
TRICHLORFON	1B	Cutworms Green vegetable bug Rutherglen bug	Australia: APVMA nominated for reconsideration after 2029 EU: Not approved Canada: No current review USA: Review upcoming

FUNGICIDES – Disease Control

Active Constituent	MoA Group	Pest	Risks and Comments
AZOXYSTROBIN	11	Sclerotinia rot Base rot/Bottom rot	Australia: No current concerns. Codex MRL: 3 mg/Kg EU: Approved UK: Approved Canada: In review
AZOXYSTROBIN OXATHIAPIPROLIN	11 + 49	Alternaria leaf spot Downy mildew Sclerotinia rot	AZOXYSTROBIN Australia: No current concerns. Codex MRL: 3 mg/Kg EU: Approved UK: Approved Canada: In review OXATHIAPIPROLIN Australia: No current concerns. Codex MRL: 5 mg/Kg EU: Approved UK: Approved Canada: No current review
BACILLUS AMYLOLIQUEFACIENS STRAIN QST 713	BM02	Permit PER87630 for the control of Bacterial spot / Blight	Australia: No current concerns. Permit PER87630 Expiry date: 31/03/2027 EU: Approved
BOSCALID	7	Sclerotinia rot	Australia: No current concerns. Codex MRL: 40 mg/Kg EU: Approved UK: Approved Canada: In review

Active Constituent	MoA Group	Pest	Risks and Comments
CAPTAN	M4	Grey Mould (Leafy lettuce)	Australia: No current concerns. Permit PER14326 Expiry date: 31/03/2027 EU: Approved UK: Approved Canada: No current review
CHLOROTHALONIL	M5	Permit PER14964 for the control of Anthracnose (shot hole)	Australia: APVMA reconsideration. Prioritised to be commenced by 2028. Permit PER14964 Expiry date: 31/07/2026 EU: Not approved Canada: In review USA: Review upcoming
COPPER	M1	Anthracnose Bacterial spot Downy mildew Dry leaf spot	Australia: No current concerns. EU: Approved, candidate for substitution. Canada: No current review
DIMETHOMORPH	40	Anthracnose Downy mildew Septoria leaf spot	Australia: No current concerns. Codex MRL: 9 mg/Kg EU: Not approved UK: Approved Canada: No current review
DIMETHOMORPH AMETOCTRADIN	40 + 45	Downy mildew	DIMETHOMORPH Australia: No current concerns. Codex MRL: 9 mg/Kg EU: Not approved UK: Approved Canada: No current review AMETOCTRADIN Australia: No current concerns. Codex MRL: 50 mg/Kg EU: Approved UK: Approved Canada: No current review

Active Constituent	MoA Group	Pest	Risks and Comments
FENHEXAMID	17	Botrytis/Grey mould	Australia: No current concerns. Codex MRL: 30 mg/Kg EU: Approved UK: Approved Canada: No current review
FLORYLPICOXAMID	21	Sclerotinia rot	Australia: No current concerns. EU: Pending Canada: No current review
FLUDIOXONIL CYPRODINIL	9+12	Anthracnose Sclerotinia rot	FLUDIOXONIL Australia: No current concerns. Codex MRL: 40 mg/Kg EU: Approved, candidate for substitution. UK: Approved Canada: No current review CYPRODINIL Australia: No current concerns. Codex MRL: 50 mg/Kg EU: Approved, candidate for substitution. UK: Approved Canada: In review
FLUOPYRAM TRIFLOXYSTROBIN	7+11	Sclerotinia rot	FLUOPYRAM Australia: No current concerns. Codex MRL: 15 mg/Kg EU: Approved UK: Approved Canada: No current review TRIFLOXYSTROBIN Australia: No current concerns. Codex MRL: 15 mg/Kg EU: Approved UK: Approved Canada: In review

Active Constituent	MoA Group	Pest	Risks and Comments
IPRODIONE	2	Botrytis/Grey mould Sclerotinia rot	Australia: No current concerns. EU: Not approved. Significant toxicity concerns. Canada: Most of the food crop uses deleted USA: Review upcoming Codex: No MRLs
ISOFETAMID	7	Lettuce drop / Sclerotinia	Australia: No current concerns. Codex MRL: 7 mg/Kg EU: Approved UK: Approved Canada: No current review
MANCOZEB	M3	Downy mildew Septoria leaf spot	Australia: APVMA reconsideration. Prioritised to be commenced by 2027. EU: Not approved UK: Withdrawn. Expiry date: 31/05/2024 Canada: Most of uses cancelled USA: Review upcoming
MANCOZEB DIMETHOMORPH	M3	Downy mildew, White Blister and Alternaria Leaf Spot	Permit PER14958 Expiry date: 31/10/2027 MANCOZEB Australia: APVMA reconsideration. Prioritised to be commenced by 2027. DIMETHOMORPH Australia: No current concerns. Codex MRL: 9 mg/Kg EU: Not approved UK: Approved Canada: No current review
MANDESTROBIN	11	Sclerotinia rot	Australia: No current concerns. EU: Approved UK: Approved Canada: No current review

Active Constituent	MoA Group	Pest	Risks and Comments
MANDIPROPAMID	40	Downy mildew	Australia: No current concerns. Codex MRL: 25 mg/Kg EU: Approved UK: Approved Canada: In review
METALAXYL	4	Downy Mildew Damping off	METALAXYL Australia: No current concerns. Permit PER14318 Expiry date: 31/07/2027 EU: Approved, candidate for substitution. UK: Approved Canada: In review
METIRAM	M3	Downy mildew Septoria leaf spot	Australia: APVMA reconsideration. Prioritised to be commenced by 2027. EU: Not approved UK: Approved Canada: Foliar uses other than potato were cancelled
OXATHIAPIPROLIN	49	Downy mildew	Australia: No current concerns. Codex MRL: 5 mg/Kg EU: Approved UK: Approved Canada: No current review
PENTHIOPYRAD	7	Powdery mildew Sclerotinia rot	Australia: No current concerns. Codex MRL: 30 mg/kg EU: Approved UK: Approved Canada: No current review
PHOSPHOROUS (PHOSPHONIC) ACID	P07 (33)	Downy Mildew and Damping Off	Australia: No current concerns. Permit PER13698 Expiry date: 30/09/2025
POTASSIUM BICARBONATE	M2	Permit PER13695 for the control of Powdery Mildew	Australia: No current concerns. Permit PER13695 Expiry date: 31/07/2025 Canada: In review

Active Constituent	MoA Group	Pest	Risks and Comments
PROCHLORAZ	3	Permit PER81131 for the control of Anthracnose	Australia: No current concerns. Permit PER81131 Expiry date: 31/12/2028 EU: Not approved UK: Approved
PROPAMOCARB FLUOPICOLIDE	28 + 43	Downy mildew	PROPAMOCARB Australia: No current concerns. Codex MRL: 100 mg/Kg EU: Approved UK: Approved FLUOPICOLIDE Australia: No current concerns. Codex MRL: 30 mg/Kg EU: Approved, candidate for substitution. UK: Approved Canada: No current review
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

Active Constituent	MoA Group	Pest	Risks and Comments
PYDIFLUMETOFEN FLUDIOXONIL	7 + 12	Grey mould White mould	PYDIFLUMETOFEN Australia: No current concerns. EU: Pending UK: Approved Canada: In review
			FLUDIOXONIL Australia: No current concerns. Codex MRL: 40 mg/Kg EU: Approved, candidate for substitution. UK: Approved Canada: No current review
PYRIMETHANIL	9	Permit PER12565 for the control of Grey Mould	Australia: No current concerns. Permit PER12565 Expiry date: 30/04/2030 EU: Approved UK: Approved Canada: In review
QUINTOZENE	14	Bottom Rot (Rhizoctonia)	Australia: No current concerns. EU: Not approved Canada: No current review
TEBUCONAZOLE	3	Sclerotinia rot	Australia: APVMA: Removed from nomination list - maintain watching brief EU: Approved, candidate for substitution. UK: Approved Canada: Phase-Out USA: Review upcoming
THIRAM	M3	Botrytis/Grey mould Septoria leaf spot Anthracnose	Australia: APVMA reconsideration. Prioritised to be commenced by 2027. EU: Not approved Canada: Cancelled all foliar uses
TOLCLOFOS-METHYL	14	Bottom rot	Australia: No current concerns. EU: Approved UK: Approved

HERBICIDES – Weed Control

Active Constituent	MoA Group	Risks and Comments	
CHLORIDAZON	5	Australia: No current concerns. EU: Not approved	
CLETHODIM	1	Australia: No current concerns. EU: Approved UK: Approved Canada: No current review	
DIQUAT (Vegetables)	22	APVMA proposed decisions published July 2024. Only uses up to 283gai/ha to be kept. Publication of the final regulatory decision is expected in December 2025. Codex: No MRLs. EU: Not approved (withdrawn in 2018). UK: Not approved. USA: Registered (under review).	
FLUAZIFOP-P PRESENT AS THE BUTYL ESTER	1	Australia: APVMA nominated for reconsideration and for targeted spray drift reconsideration EU: Approved Canada: No current review	
PARAQUAT (Vegetables)	22	APVMA proposed decisions July 2024. Only uses up to 231gai/ha to be kept. Publication of the final regulatory decision is expected in December 2025. Codex: Leafy vegetables: 0.07 mg/kg Canada: Not approved. EU and UK: Not approved (2007). USA: Restricted use (under review).	
PENDIMETHALIN	3	Australia: No current concerns. EU: Approved, candidate for substitution. UK: Approved Canada: In review USA: Review upcoming	
PROPYZAMIDE	3	Australia: No current concerns. EU: Approved, candidate for substitution. UK: Approved Canada: No current review	

Active Constituent	MoA Group	Risks and Comments	
SETHOXYDIM	1	Australia: No current concerns. EU: Not approved Canada: Phase-Out	
TRIFLURALIN	3	Australia: No current concerns. EU: Not approved Canada: No current review, USA: Review upcoming	
PHENMEDIPHAM	5	Australia: No current concerns. Permit PER81241 Expiry date: 31/03/2028 EU: Approved UK: Approved Canada: No current review	

PLANT GROWTH REGULATORS – and others

Active Constituent	Use	Risks and Comments
INDOLE BUTYRIC ACID = IBA	Aid in promotion of root formation, may stimulate plant growth, reduction of transplant shock.	Australia: No current concerns.
1-METHYLCYCLOPROPENE	Postharvest treatment	Australia: No current concerns. EU: Approved UK: Approved Canada: No current review

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