

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Regulatory pressures on agrichemicals are increasing globally, with many being either restricted or withdrawn from use.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

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/NEMATICIDES - Insect and other Pests Control

Active constituent	MoA Group	Pest	Risks and Comments
ABAMECTIN	6	Root-knot nematodes Vegetable leafminer	Australia: APVMA nominated for reconsideration and spray drift assessment Codex MRL: 0.01 mg/Kg (melons, except watermelon) EU: Approved Canada: In review
AFIDOPYROPEN	9D	Cabbage aphid Cotton aphid (Melon aphid) Currant lettuce aphid Green peach aphid Silverleaf (Poinsettia) whitefly	Australia: No current concerns. EU: Not approved UK: No registrations Canada: No current review USA: Approved
ALPHA-CYPERMETHRIN	3A	Permit PER80138 for the control of Cucumber fruit fly	Australia: APVMA nominated for reconsideration after 2029 Permit PER80138 Expiry date: 31/12/2029 Codex MRL: 0.07 mg/Kg EU: Not approved
Bacillus thuringiensis	11A	Armyworms Cabbage white butterfly Helicoverpa Loopers	Australia: No current concerns. USA: Review upcoming
BIFENAZATE	20D	Bryobia mite Two-spotted (Red spider) mite	Australia: No current concerns. Codex MRL: 0.5 mg/Kg EU: Approved UK: Approved Canada: In review

Active constituent	MoA Group	Pest	Risks and Comments
BIFENTHRIN	3A	Cucumber moth Helicoverpa Silverleaf (Poinsettia) whitefly	Australia: APVMA nominated for reconsideration after 2029 EU: Not approved
CARBARYL	1A	28-spotted potato ladybird Armyworms Cucurbit stem borer Cutworms European earwig Green vegetable bug Helicoverpa Leaf eating ladybirds Potato moth (Leafminer) Rutherglen bug Wingless grasshopper	Australia: No current concerns. EU: Not approved Canada: In review USA: Review upcoming Codex: No Codex MRLs
CHLORANTRANILIPROLE	28	Cucumber moth Helicoverpa	Australia: No current concerns. Codex MRL: 0.3 mg/Kg EU: Approved UK: Approved Canada: In review
CHLORPYRIFOS	1B	Ants, cutworm, mealybugs, vegetable weevil, white flies, wingless grasshopper	Australia: The APVMA issued a final decision in September 2024. All cucurbit uses were cancelled. Products with previously approved labels must not be possessed or used after September 30, 2025. The final decision was published in the APVMA Official Gazette on October 3, 2024. Codex: All Codex MRLs deleted EU: Not approved Canada: All uses cancelled 2023 USA: Upcoming review
CLITORIA TERNATEA EXTRACT	-	Silverleaf whitefly (biotype b)	Australia: No current concerns.

Active constituent	MoA Group	Pest	Risks and Comments
CLOTHIANIDIN	4A	Cucumber Fruit Fly	Australia: APVMA: Currently under review. Proposed regulatory decisions expected between Dec. 2025 to Oct. 2026. Permit PER95266 Expiry date: 31/01/2026 Codex MRL: 0.02 mg/Kg EU: Not approved Canada: In review USA: Review upcoming
CYANTRANILIPROLE	28	Melon aphid Silverleaf whitefly Cotton bollworm Cucumber moth Native budworm [Suppression only] Western flower thrips Permit PER93849 for the control of Liriomyza leafminers	Australia: No current concerns. Permit PER93849 Expiry date: 31/12/2026 Codex MRL: 0.3 mg/Kg EU: Approved UK: Approved
CYANTRANILIPROLE DIAFENTHIURON	12A + 28	Silverleaf whitefly Melon aphid Helicoverpa spp. Cucumber moth Cluster caterpillar Green peach aphid Two-spotted mite Suppression of: Western flower thrips Tomato thrips Plague thrips	CYANTRANILIPROLE Australia: No current concerns. Permit PER93849 Expiry date: 31/12/2026 Codex MRL: 0.3 mg/Kg EU: Approved UK: Approved DIAFENTHIURON Australia: No current concerns. EU: Not approved

Active constituent	MoA Group	Pest	Risks and Comments
CYROMAZINE	17	Permit PER81867 for the control of Leaf miner	Australia: Reviewed in 2014. No current concerns. Permit PER81867 Expiry date: 30/09/2026 Codex MRL: 0.5 mg/Kg (melons, except watermelon) EU: Not approved
DIAZINON	18	Caterpillars Cutworms Thrips	Australia: APVMA made a Final Decision on 10 September 2024. 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
DIMETHOATE	18	Aphids, Thrips, Green Vegetable Bug, Jassids Cucumber Fly Permit PER 87065 as postharvest treatment for: Cucumber fly, Lesser Queensland Fruit Fly Queensland Fruit Fly and Mediterranean fly.	Australia: APVMA reconsideration. Prioritised to be commenced by 2029. Permit PER87065 Expiry date: 30/11/2025 EU: Not approved Canada: In review USA: Review upcoming
DIMPROPYRIDAZ	36	Silver Leaf White Fly Greenhouse Whitefly Cotton/melon aphid	Australia: No current concerns. EU: Pending
EMAMECTIN	6	Cluster caterpillar Cucumber moth Helicoverpa	Australia: APVMA nominated for reconsideration and for targeted spray drift reconsideration EU: Approved, candidate for substitution. UK: Withdrawn. Expiry date: 30/11/2024
ETOXAZOLE	108	Two-spotted mite	Australia: No current concerns. Permit PER14650 Expiry date: 30/11/2027 EU: Approved, candidate for substitution. UK: Approved

Active constituent	MoA Group	Pest	Risks and Comments
FLONICAMID	29	Melon aphid Green peach aphid Silverleaf (Poinsettia) whitefly	Australia: No current concerns. Codex MRL: 0.2 mg/Kg EU: Approved
FLUAZAINDOLIZINE	N-UN	Root-knot nematodes	Australia: No current concerns. EU: Pending
FLUBENDIAMIDE	28	Helicoverpa spp. Cucumber moth	Australia: No current concerns. Codex MRL: 0.2 mg/Kg EU: Not approved UK: Withdrawn. Expiry date: 30/11/2024
FLUENSULFONE	28	Root-knot nematodes	Australia: No current concerns. Codex MRL: 0.2 mg/Kg EU: Not approved UK: Withdrawn. Expiry date: 30/11/2024 USA: No registrations
FLUPYRADIFURONE	4D	Melon aphid Green peach aphid Greenhouse whitefly Silverleaf (Poinsettia) whitefly	Australia: No current concerns. Codex MRL: 0.4 mg/Kg (melons, except watermelon) EU: Approved UK: Approved
HELICOVERPA ARMIGERA NPV	31	Helicoverpa spp.	Australia: No current concerns. EU: Approved
HEXYTHIAZOX	10A	Permit PER95394 for the control of: Tomato red spider mite Two spotted mites Broad mite Tomato russet mite	Australia: No current concerns. Permit PER95394 Expiry date: 30/09/2029 Codex MRL: 0.05 mg/Kg EU: Approved UK: Approved

Active constituent	MoA Group	Pest	Risks and Comments
IMIDACLOPRID	4A	Green peach aphid	Australia: APVMA: Currently under review. Proposed regulatory decisions expected between Dec. 2025 to Oct. 2026. Codex MRL: 0.2 mg/Kg (melons, except watermelon) EU: Not approved Canada: Field uses cancelled or amended USA: Re-registration with risk mitigation measures. Review upcoming
MALATHION	1B	Aphid, Green Vegetable bug Jassid Leaf hopper Red legged earth mite Rutherglen bug 28-spotted ladybird	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 Australia = 2 mg/kg
METHOMYL	1A	Permit PER82428 for the control of: Helicoverpa spp. Cucumber moth Cluster caterpillar Loopers Webworm Rutherglen bug Thrips	Australia: APVMA reconsideration. Prioritised to be commenced by 2026. Permit PER82428 Expiry date: 31/01/2029 Codex MRL: 0.1 mg/Kg EU: Not approved Canada: In review USA: Review upcoming
NUCLEAR POLYHEDROSIS VIRUS OF HELICOVERPA ARMIGERA		Helicoverpa spp.	Australia: No current concerns. EU: Approved

Active constituent	MoA Group	Pest	Risks and Comments
ORANGE OIL		Silverleaf whitefly Two spotted mite Suppression: Western flower thrips Green peach aphid Melon aphid Serpentine leafminer	Australia: No current concerns. EU: Approved UK: Approved
PARAFFINIC OIL		Aphids Leafhoppers Mites Thrips	Australia: No current concerns.
PETROLEUM OIL	UN	Aphids Mites Thrips Leafhoppers Permit PER12221 for the control of Greenhouse whitefly and Silverleaf whitefly.	Australia: No current concerns. Permit PER12221 Expiry date: 30/09/2027 EU: Not approved
PIPERONYL BUTOXIDE PYRIPROXYFEN	7 C	Silverleaf Whitefly	PIPERONYL BUTOXIDE Australia: No current concerns. Codex MRL: 1 mg/Kg UK: Approved USA: Review upcoming PYRIPROXYFEN Australia: No current concerns. Codex MRL: 0.07 mg/Kg (melons, except watermelon) EU: Approved UK: Approved

Active constituent	MoA Group	Pest	Risks and Comments
PIRIMICARB	1A	Aphids	Australia: No current concerns. Codex MRL: 0.2 mg/Kg (melons, except watermelon) EU: Approved, candidate for substitution. UK: Approved
PYMETROZINE	9B	Melon aphid Green peach aphid Suppression of: Silverleaf whitefly Greenhouse whitefly	Australia: APVMA nominated for reconsideration and spray drift assessment EU: Not approved Canada: No current review
PYRETHRINS	3A	Fruit fly Rutherglen bug Spiders	Australia: No current concerns. Codex MRL: 0.05 mg/Kg EU: Approved UK: Approved
PYRIPROXYFEN	7C	Ants Greenhouse whitefly Silverleaf (Poinsettia) whitefly	Australia: No current concerns. Codex MRL: 0.07 mg/Kg (melons, except watermelon) EU: Approved UK: Approved
SPINETORAM	5	Helicoverpa spp. Western flower thrips Permit PER94451 for the control of Leaf miners	Australia: No current concerns. Permit PER94451 Expiry date: 31/07/2027 Codex MRL: 0.01 mg/Kg (melons, except watermelon) EU: Not approved UK: Withdrawn. Expiry date: 30/09/2024 Canada: In review

Active constituent	MoA Group	Pest	Risks and Comments
SPINOSAD	5	Helicoverpa Western flower thrips Permit PER89870 for the control of Fall Armyworm. Permit PER94331 for the control of leafminers	Australia: Reviewed in 2014. No current concerns. Permit PER89870 Expiry date: 31/07/2025 Permit PER94331 Expiry date: 30/04/2026 Codex MRL: 0.2 mg/Kg EU: Approved UK: Approved Canada: In review
SPIROTETRAMAT	23	Melon aphid Green peach aphid Silverleaf (Poinsettia) whitefly	Australia: No current concerns. Codex MRL: 0.2 mg/Kg EU: Not approved UK: Approved Canada: In review
SULFOXAFLOR	4C	Melon aphid Green peach aphid Greenhouse whitefly	Australia: No current concerns. Codex MRL: 0.5 mg/Kg EU: Approved UK: Approved
TRICHLORFON	1B	Cabbage White Butterfly Cabbage Moth Green Vegetable Bug Rutherglen Bug	Australia: APVMA nominated for reconsideration after 2029 EU: Not approved USA: Review upcoming

FUNGICIDES – Disease Control

ACTIVE CONSTITUENT	MoA Group	Pest	Risks and Comments
AZOXYSTROBIN	11	Downy mildew Gummy stem blight Powdery mildew Permit PER91493 for Post Harvest treatment to control Rot and Stem end rot.	Australia: No current concerns. Permit PER91493 Expiry date: 31/05/2029 Codex MRL: 1 mg/Kg EU: Approved UK: Approved Canada: In review
BOSCALID KRESOXIM- METHYL	7 + 11	Powdery mildew	BOSCALID Australia: No current concerns. Codex MRL: 3 mg/Kg EU: Approved UK: Approved Canada: In review KRESOXIM-METHYL Australia: No current concerns. Codex MRL: 0.5 mg/Kg EU: Approved UK: Approved
BUPIRIMATE	8	Powdery mildew	Australia: No current concerns. EU: Approved UK: Approved
CHLOROPICRIN 1,3- DICHLOROPROPENE	1	Soil borne pathogens (Fusarium oxysporum)	CHLOROPICRIN Australia: APVMA: no current concerns. EU: Not approved 1,3-DICHLOROPROPENE Australia: APVMA: no current concerns. USA: Review upcoming

ACTIVE CONSTITUENT	MoA Group	Pest	Risks and Comments
CHLOROTHALONIL	M5	Alternaria leaf blight Anthracnose Downy mildew Gummy stem blight Powdery mildew Rhizoctonia ground rot Target leafspot	Australia: APVMA reconsideration. Prioritised to be commenced by 2028. Codex MRL: 2 mg/Kg (melons, except watermelon) EU: Not approved Canada: In review USA: Review upcoming
COPPER	M1	Angular leaf spot Anthracnose Bacterial spot Downy mildew Gummy stem blight Late (Irish) blight Powdery mildew Rust Septoria Target spot	Australia: No current concerns. EU: Approved, candidate for substitution.
CYFLUFENAMID	U6	Powdery mildew	Australia: No current concerns. EU: Approved UK: Approved
DIMETHOMORPH	40	Alternaria leaf blight Anthracnose Downy mildew Gummy stem blight Septoria leaf spot	Australia: No current concerns. Codex MRL: 0.5 mg/Kg EU: Not approved UK: Approved

ACTIVE CONSTITUENT	MoA Group	Pest	Risks and Comments
DIMETHOMORPH AMETOCTRADIN	45 + 40	Downy mildew	DIMETHOMORPH Australia: No current concerns. Codex MRL: 0.5 mg/Kg EU: Not approved UK: Approved AMETOCTRADIN Australia: No current concerns. Codex MRL: 3 mg/Kg EU: Approved UK: Approved UK: Approved
ETHANEDINITRILE		Soil borne pathogens (Fusarium oxysporum)	Australia: No current concerns.
FLORYLPICOXAMID	21	Powdery mildew	Australia: No current concerns. EU: Pending
GUAZATINE ACETATES	M7	Alternaria fruit rot Fusarium fruit rot Geotrichum fruit rot (Sour rot) Pink mould rot Rhizopus rot	Australia: No current concerns. EU: Not approved
HYDROGEN PEROXIDE PEROXYACETIC ACID	М	Powdery mildew	Australia: No current concerns. EU: Approved
IMAZALIL	3	Alternaria fruit rot Fusarium fruit rot Geotrichum fruit rot (Sour rot) Pink mould rot	Australia: No current concerns. EU: Approved
IODINE	М	Bactericide Fungi	Australia: No current concerns.

ACTIVE CONSTITUENT	MoA Group	Pest	Risks and Comments
MANCOZEB	M3	Alternaria leaf blight Anthracnose Downy mildew Gummy stem blight Powdery 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 + 40	Downy mildew Anthracnose Gummy stem blight Alternaria leag spot Septoria spot	MANCOZEB Australia: APVMA reconsideration. Prioritised to be commenced by 2027. DIMETHOMORPH Australia: No current concerns. Codex MRL: 0.5 mg/Kg EU: Not approved UK: Approved
MANCOZEB METALAXYL	4 + M3	Downy mildew Anthracnose, Gummay Stem Blight, Alternaria Leaf Spot, also Septoria Spot (pumpkins)	MANCOZEB Australia: APVMA reconsideration. Prioritised to be commenced by 2027. METALAXYL Australia: No current concerns. Codex MRL: 0.15 mg/Kg (melons, except watermelon) EU: Approved, candidate for substitution. UK: Approved Canada: In review
METALAXYL	4	Phytophthora soil fungus (Dieback) Alternaria leaf blight Anthracnose Damping off Downy mildew Gummy stem blight	Australia: No current concerns. Codex MRL: 0.15 mg/Kg (melons, except watermelon) EU: Approved, candidate for substitution. UK: Approved Canada: In review

ACTIVE CONSTITUENT	MoA Group	Pest	Risks and Comments
METIRAM	M3	Downy mildew Gummy stem blight	Australia: APVMA reconsideration. Prioritised to be commenced by 2027. EU: Not approved UK: Approved Canada: Foliar uses other than potato were cancelled
METRAFENONE	50	Powdery mildew	Australia: No current concerns. Codex MRL: 0.5 mg/Kg EU: Approved; UK: Approved
OXATHIAPIPROLIN	49	Downy mildew	Australia: No current concerns. Codex MRL: 0.2 mg/Kg EU: Approved; UK: Approved Canada: No current review
PENTHIOPYRAD	7	Grey mould Gummy stem blight Powdery mildew	Australia: No current concerns. Codex MRL: 0.5 mg/Kg EU: Approved; UK: Approved
PHOSPHOROUS (PHOSPHONIC) ACID	P07 (33)	Downy mildew	Australia: No current concerns.
PROPAMOCARB FLUOPICOLIDE	28 + 43	Downy mildew	PROPAMOCARB Australia: No current concerns. Codex MRL: 5 mg/Kg EU: Approved UK: Approved FLUOPICOLIDE Australia: No current concerns. Codex MRL: 0.5 mg/Kg EU: Approved, candidate for substitution. UK: Approved
PROPINEB	M3	Downy mildew	Australia: APVMA reconsideration. Prioritised to be commenced by 2027. EU: Not approved

ACTIVE CONSTITUENT	MoA Group	Pest	Risks and Comments
PROPINEB OXADIXYL	M3 + 4	Downy mildew Anthracnose Gummy stem blight	PROPINEB Australia: APVMA reconsideration. Prioritised to be commenced by 2027. EU: Not approved OXADIXYL Australia: No current concerns. EU: Not approved
PROQUINAZID	13	Powdery mildew	Australia: No current concerns. EU: Approved UK: Approved
PYDIFLUMETOFEN DIFENOCONAZOLE	7+3	Alternaria leaf spot Gummy stem blight Cercospora leaf spot Powdery mildew	PYDIFLUMETOFEN Australia: No current concerns. Codex MRL: 0.4 mg/Kg EU: Pending UK: Approved Canada: In review DIFENOCONAZOLE Australia: APVMA nominated for reconsideration after 2029 Codex MRL: 0.7 mg/Kg (melons, except watermelon) EU: Approved, candidate for substitution. UK: Approved Canada: In review
PYRIOFENONE	50	Powdery mildew	Australia: No current concerns. Codex MRL: 0.2 mg/Kg EU: Approved UK: Approved
Streptomyces lydicus		Powdery mildew	Australia: No current concerns.

ACTIVE CONSTITUENT	MoA Group	Pest	Risks and Comments
TEA TREE OIL	BM01	Powdery mildew	Australia: No current concerns. EU: Approved USA: Review upcoming
TRIADIMEFON	3	Powdery mildew	Australia: APVMA nominated for reconsideration after 2029 Codex MRL: 0.2 mg/Kg EU: Not approved Canada: No current review
TRIADIMENOL	3	Powdery mildew	Australia: APVMA nominated for reconsideration after 2029 Codex MRL: 0.2 mg/Kg EU: Not approved Canada: No current review
ZINEB	M3	Anthracnose Downy mildew	Australia: APVMA reconsideration. Prioritised to be commenced by 2027. EU: Not approved

HERBICIDES – Weed Control

Active Constituent	MoA Group	Risks and Comments
CLOMAZONE	13	Australia: No current concerns. EU: Approved UK: Approved Canada: In review
DIQUAT	22	Australia: APVMA: Currently under review. APVMA proposed decisions July 2024 It is proposed to remove uses in melons. Only uses up to 283gai/ha to be kept. Publication of the final regulatory decision is expected in December 2025 EU: Not approved (withdrawn in 2018). UK: Not approved.
FLUAZIFOP-P PRESENT AS THE BUTYL ESTER	1	Australia: APVMA nominated for reconsideration and for targeted spray drift reconsideration EU: Approved

Active Constituent	MoA Group	Risks and Comments
GLYPHOSATE	9	Australia: APVMA nominated for reconsideration for targeted spray drift reconsideration EU: Approved UK: Approved Canada: No current review USA: Review upcoming
PARAQUAT	22	Australia: APVMA: Currently under review. APVMA proposed decisions July 2024 It is proposed to remove uses in melons. Only uses up to 231gai/ha to be kept. Publication of the final regulatory decision is expected in December 2025 . EU: Not approved (withdrawn in 2018). UK: Not approved.
QUIZALOFOP-P-ETHYL	1	Australia: No current concerns. EU: Approved UK: Approved
SETHOXYDIM	1	Australia: No current concerns. EU: Not approved Canada: Phase-Out

PLANT GROWTH REGULATORS – and others

Active Constituent	Use	Risks and Comments
1-METHYLCYCLOPROPENE	Extending the post-harvest life of melons.	Australia: No current concerns. EU: Approved UK: Approved

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Communications Manager

Hort Innovation

Level 7, 141 Walker Street North Sydney NSW 2060

Australia

Email: communications@horticulture.com.au

Phone: 02 8295 2300