

Pumpkin

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Regulatory pressures on agrichemicals are increasing globally, with many being either restricted or withdrawn from use.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 Pumpkin 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	Root-knot nematode; PER96481 for the control of Leaf miner	Australia: APVMA nominated for reconsideration and spray drift assessment. Permit PER96481 Expiry date: 31/07/2028 Canada: Re-evaluation finalised. Label amendments to mitigate risks to human health and environment (July, 2025)
AFIDOPYROPEN	9D	Cabbage aphid Cotton / melon aphid Currant lettuce aphid Green peach aphid Silverleaf (Poinsettia) whitefly	Australia: No current concerns. Codex MRL: 0.05 mg/Kg EU: Not 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 EU: Not approved
BIFENAZATE	20D	Bryobia mite Two-spotted (Red spider) mite	Australia: No current concerns. Codex MRL: 0.5 mg/Kg UK: Withdrawn (2029). Canada: In re-evaluation
BIFENTHRIN	3A	Brown marmorated stink bug Caterpillars Cucumber moth Helicoverpa Mites Moths Silverleaf (Poinsettia) whitefly Whiteflies Yellow spotted stink bug	Australia: APVMA nominated for reconsideration after 2029. EU: Not approved Canada: Cancelled
BUPROFEZIN	16	Permit PER82467 for the control of Greenhouse whitefly and Bemisia spp.	Australia: No current concerns. Permit PER82467 Expiry date: 31/03/2030 Codex MRL: 0.7 mg/Kg

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CARBARYL	1A	28-spotted potato ladybird Armyworms Cucurbit stem borer Cutworms European earwig Green vegetable bug Helicoverpa Leaf eating ladybirds Potato moth (Leafminer) Pumpkin beetle Rutherglen bug Wingless grasshopper	Australia: Codex - being considered for periodic review EU: Not approved Canada: In re-evaluation
CHLORANTRANILIPROLE	28	Cucumber moth Helicoverpa	Australia: No current concerns. Codex MRL: 0.3 mg/Kg 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
CLOTHIANIDIN	4A	PER95266 for the control of Cucumber Fruit Fly	Australia: APVMA: Neonicotinoids chemical review has been delayed. The proposed regulatory decision unlikely before 2027. Permit PER95266 Expiry date: 30/09/2027 Codex MRL: 0.02 mg/Kg EU: Not approved Canada: In re-evaluation
CYANTRANILIPROLE	28	Cotton / melon aphid Cucumber moth Helicoverpa Silverleaf (Poinsettia) whitefly 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
CYROMAZINE	17	Permit PER81867 for the control of Liriomyza species	Australia: No current concerns. Permit PER81867 Expiry date: 30/09/2026 EU: Not approved
DIAZINON	1B	Caterpillars Cutworms Thrips	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

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DIMPROPYRIDAZ	36	Cotton/melon aphid Greenhouse whitefly Silverleaf whitefly	Australia: No current concerns. EU: Pending
EMAMECTIN	6	Cluster caterpillar Cucumber moth Helicoverpa Tomato grub	Australia: Nominated for targeted spray drift reconsideration EU: Approved, candidate for substitution
ETOXAZOLE	10B	Permit PER82460 for the control of Two spotted mites and tomato Red spider mite	Australia: No current concerns. Permit PER82460 Expiry date: 31/05/2028 EU: Approved, candidate for substitution
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
FLONICAMID	29	Cotton / melon aphid Green peach aphid Silverleaf (Poinsettia) whitefly	Australia: No current concerns. Codex MRL: 0.2 mg/Kg
FLUAZAINDOLIZINE	N-UN	Root-knot nematodes	Australia: No current concerns. Codex MRL: 0.1 mg/Kg EU: Pending
FLUBENDIAMIDE	28	Cluster caterpillar Helicoverpa	Australia: No current concerns. Codex MRL: 0.2 mg/Kg EU: Not approved
FLUENSULFONE	5	Root-knot nematodes	Australia: No current concerns.
FLUPYRADIFURONE	4D	Greenhouse whitefly Silverleaf (Poinsettia) whitefly Cotton / melon aphid Green peach aphid	Australia: No current concerns.
HEXYTHIAZOX	10A	Permit PER95394 for the control of Tomato spider mite, Twospotted mite, Broad mite, Tomato russet mite	Australia: No current concerns. Permit PER95394 Expiry date: 30/09/2029 Codex MRL: 0.05 mg/Kg
IMIDACLOPRID	4A	Green peach aphid Silverleaf (Poinsettia) whitefly	Australia: APVMA: Neonicotinoids chemical review has been delayed. The proposed regulatory decision unlikely before 2027. EU: Not approved Canada: Very few uses allowed in greenhouses and seed treatment.
IRON EDTA COMPLEX	--	Snails and slugs	Australia: No current concerns

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MALATHION	1B	28-spotted potato ladybird Aphids Australian plague locust Green vegetable bug Jassids Leafhoppers Migratory locust Pumpkin beetle Redlegged earth mite Rutherglen bug 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. Canada: In re-evaluation
METALDEHYDE	--	Snails and slugs	Australia: No current concerns Canada: In re-evaluation
METHOMYL	1A	Helicoverpa spp. Cucumber moth Cluster caterpillar Loopers Webworm Rutherglen bug Thrips including Western Flower Thrip	Australia: APVMA reconsideration. Was to start 2026. APVMA to publish a new Chemical Review priority list by mid 2026. Permit PER82428 Expiry date: 31/01/2029 Codex MRL: 0.1 mg/Kg EU: Not approved Canada: In re-evaluation
NUCLEAR POLYHEDROSIS VIRUS OF HELICOVERPA ARMIGERA	--	Helicoverpa	Australia: No current concerns.
NUCLEAR POLYHEDROSIS VIRUS OF HELICOVERPA ZEA	--	Helicoverpa	Australia: No current concerns.
PARAFFINIC OIL	UNM	Permit PER93806 for the control of Melon thrip (Postharvest treatment for produce destined for export)	Australia: No current concerns. Permit PER93806 Expiry date: 31/07/2027
PETROLEUM OIL	UN	Aphids Leafhoppers Mites Thrips PER12221 for the control of: Greenhouse whitefly Sweet potato whitefly Silverleaf whitefly	Australia: No current concerns. Permit PER12221 Expiry date: 30/09/2027 EU: Not approved
PIRIMICARB	1A	Aphids	Australia: No current concerns. Codex MRL: 1 mg/Kg EU: Approved, candidate for substitution Canada: Cancelled

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PYRETHRINS	3A	Ants Aphids Cabbage white butterfly Caterpillars Diamondback (Cabbage) moth Earwigs Flies Leafhoppers Mealybugs Scale insects Thrips Two-spotted (Red spider) mite Whiteflies	Australia: No current concerns. Codex MRL: 0.05 mg/Kg
PYRIPROXYFEN	7C	Greenhouse whitefly Silverleaf (Poinsettia) whitefly	Australia: No current concerns.
SPINETORAM	5	Cabbage white butterfly Caterpillars Cucumber moth Helicoverpa Melon thrips Western flower thrips PER94451 for the control of Leaf miners	Australia: No current concerns. Permit PER94451 Expiry date: 31/07/2027 EU: Not approved Canada: In re-evaluation
SPINOSAD	5	Cucumber moth Helicoverpa Western flower thrips Permit PER89870 for the control of Fall Armyworm Permit PER94331 for the control of Dipteran leaf miners	Australia: No current concerns. Permit PER89870 Expiry date: 31/10/2030 Permit PER96806 Expiry date: 30/05/2031 Codex MRL: 0.2 mg/Kg Canada: In re-evaluation
SPIROTETRAMAT	23	Cotton / melon aphid Green peach aphid Silverleaf (Poinsettia) whitefly	Australia: No current concerns. Codex MRL: 0.2 mg/Kg EU: Not approved Canada: In re-evaluation
SULFOXAFLOLOR	4C	Cotton / melon aphid Green peach aphid Greenhouse whitefly	Australia: No current concerns. Codex MRL: 0.5 mg/Kg
TRICHLORFON	1B	Cutworms	Australia: APVMA nominated for reconsideration after 2029. EU: Not approved Canada: Cancelled

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FUNGICIDES – Disease Control

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Active Constituent	MoA Group	Pest	Risks and Comments
AUREOBASIDIUM PULLULANS	--	Grey mould	Australia: No current concerns.
AZOXYSTROBIN	11	Downy mildew Gummy stem blight PER93402 for the control of Powdery mildew	Australia: No current concerns. Permit PER93402 Expiry date: 31/05/2027 Codex MRL: 1 mg/Kg UK: Withdrawn (2029). Canada: In re-evaluation
AZOXYSTROBIN DIFENOCONAZOLE	11 + 3	PER93402 for the control of Powdery mildew	AZOXYSTROBIN Australia: No current concerns. Permit PER93402 Expiry date: 31/05/2027 Codex MRL: 1 mg/Kg UK: Withdrawn (2029). Canada: In re-evaluation DIFENOCONAZOLE Australia: APVMA nominated for reconsideration after 2029. Permit PER93402 Expiry date: 31/05/2027 EU: Approved, candidate for substitution Canada: In re-evaluation
BOSCALID KRESOXIM-METHYL	7 + 11	Powdery mildew	BOSCALID Australia: No current concerns. Codex MRL: 3 mg/Kg Canada: In re-evaluation KRESOXIM-METHYL Australia: No current concerns. Codex MRL: 0.5 mg/Kg
BUPIRIMATE	8	Powdery mildew	Australia: No current concerns. UK: Withdrawn (2029).

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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. EU: Not approved Canada: In re-evaluation USA: Under Registration Review (scheduled)
COPPER	M1	Angular leaf spot Anthracnose Bacterial spot Downy mildew Gummy stem blight Late (Irish) blight Powdery mildew	Australia: No current concerns.
CYFLUFENAMID	U6	Powdery mildew	Australia: No current concerns.
DIFENOCONAZOLE	3	PER93402 for the control of Powdery mildew	Australia: APVMA nominated for reconsideration after 2029. Permit PER93402 Expiry date: 31/05/2027 EU: Approved, candidate for substitution Canada: In re-evaluation
DIMETHOMORPH	40	Alternaria leaf blight Anthracnose Downy mildew Gummy stem blight Septoria spot	Australia: No current concerns. Codex MRL: 0.5 mg/Kg EU: Not approved Canada: In re-evaluation
DIMETHOMORPH AMETOCTRADIN	40 + 45	Downy mildew	DIMETHOMORPH Australia: No current concerns. Codex MRL: 0.5 mg/Kg EU: Not approved Canada: In re-evaluation AMETOCTRADIN Australia: No current concerns Codex MRL: 3 mg/Kg UK: Withdrawn (2031).
FLORYLPICOXAMID	21	Powdery mildew	Australia: No current concerns. Codex MRL: 0.4 mg/Kg EU: Pending

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GUAZATINE ACETATES	M7	Fusarium fruit rot Pink mould rot Rhizopus rot	Australia: No current concerns. EU: Not approved
HYDROGEN PEROXIDE	M	PER93702 for the control of Hairy root or crazy root (protected cropping) (unregistered product)	Australia: No current concerns. Permit PER93702 Expiry date: 28/02/2027
HYDROGEN PEROXIDE PEROXYACETIC ACID	M	Powdery mildew	HYDROGEN PEROXIDE Australia: No current concerns. Permit PER93702 Expiry date: 28/02/2027 PEROXYACETIC ACID Australia: No current concerns.
IODINE	M	Bactericide Fungi	Australia: No current concerns. Canada: Cancelled
MANCOZEB	M3	Alternaria leaf blight Anthracnose Downy mildew Gummy stem blight Powdery mildew Septoria spot	Australia: APVMA reconsideration. Prioritised to be commenced by 2027. EU: Not approved USA: Under Registration Review (scheduled)
MANCOZEB METALAXYL	M3 + 4	Downy Mildew QLD only: Anthracnose, Gummay Stem Blight, Alternaria Leaf Spot, also Septoria Spot	MANCOZEB Australia: APVMA reconsideration. Prioritised to be commenced by 2027. EU: Not approved USA: Under Registration Review (scheduled) METALAXYL Australia: No current concerns. EU: Approved, candidate for substitution Canada: In re-evaluation
METALAXYL	4	Alternaria leaf blight Anthracnose Damping off Downy mildew Gummy stem blight Phytophthora soil fungus (Dieback)	Australia: No current concerns. EU: Approved, candidate for substitution Canada: In re-evaluation
METIRAM	M3	Downy mildew Gummy stem blight	Australia: APVMA reconsideration. Prioritised to be commenced by 2027. EU: Not approved Canada: Only approved for foliar applications in potato crops.
METRAFENONE	50	Powdery mildew	Australia: No current concerns. Codex MRL: 0.5 mg/Kg

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OXATHIPIPROLIN	49	Downy mildew	Australia: No current concerns. Codex MRL: 0.2 mg/Kg
PENTHIOPYRAD	7	Grey mould Gummy stem blight Powdery mildew	Australia: No current concerns. Codex MRL: 0.5 mg/Kg EU: Not approved
PHOSPHOROUS (PHOSPHONIC) ACID	P07 (33)	Downy mildew	Australia: No current concerns.
PROPAMOCARB HYDROCHLORIDE FLUOPICOLIDE	43	Downy mildew	PROPAMOCARB HYDROCHLORIDE Australia: No current concerns. FLUOPICOLIDE Australia: No current concerns Codex MRL: 0.5 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 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.
PYDIFLUMETOFEN DIFENOCONAZOLE	7 + 3	Powdery mildew Gummy Stem Blight Alternaria leaf spot Cercospora leaf spot	PYDIFLUMETOFEN Australia: No current concerns. Codex MRL: 0.4 mg/Kg EU: Pending Canada: In re-evaluation DIFENOCONAZOLE Australia: APVMA nominated for reconsideration after 2029. Permit PER93402 Expiry date: 31/05/2027 EU: Approved, candidate for substitution Canada: In re-evaluation
SULPHUR	M2	Anthracnose Downy mildew	Australia: No current concerns. Canada: In re-evaluation
TEA TREE OIL	BM01	Powdery mildew	Australia: No current concerns.

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TRIADIMEFON	3	Powdery mildew	Australia: APVMA nominated for reconsideration after 2029. Codex MRL: 0.2 mg/Kg EU: Not approved Canada: Restricted use
TRIADIMENOL	3	Powdery mildew	Australia: APVMA nominated for reconsideration after 2029. Codex MRL: 0.2 mg/Kg EU: Not approved Canada: Cancelled
ZINEB	M3	Anthrachnose Downy mildew	Australia: APVMA reconsideration. Prioritised to be commenced by 2027. EU: Not approved Canada: Cancelled

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R4	No current risk/concerns

HERBICIDES – Weed Control

Blue text = new APVMA approved uses

Active Constituent	MoA Group	Risks and Comments
CLOMAZONE	13	Australia: No current concerns. Canada: In re-evaluation
DIMETHENAMID-P	15	Australia: No current concerns. Canada: In re-evaluation
FLUAZIFOP-P PRESENT AS THE BUTYL ESTER	1	Australia: Nominated for targeted spray drift reconsideration Canada: Cancelled
QUIZALOFOP-P-ETHYL	1	Australia: No current concerns.
QUIZALOFOP-P-TEFURYL	1	Australia: No current concerns.
SETHOXYDIM	1	Australia: No current concerns. EU: Not approved Canada: Phase-Out

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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

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R4	No current risk/concerns

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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