

Fennel (Bulb) Agrichemical Regulatory Risk Assessment

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Regulatory pressures on agrichemicals are increasing globally, with many being either restricted or withdrawn from use.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

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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
<i>Bacillus thuringiensis</i>	11A	Armyworm, Helicoverpa, Loopers	Australia: No current concerns. USA: Review upcoming
CHLORPYRIFOS	1B	Spotted vegetable weevil, Cutworms, Field crickets, Mole crickets, Vegetable weevil	Australia: The APVMA issued a final decision on 30 September 2024. All Stalk and stem vegetables 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
CYANTRANILIPROLE	28	Rasping pests; [Suppression only] Onion thrips (<i>Thrips tabaci</i>)	Australia: No current concerns. EU: Approved UK: Approved Canada: No current review
CYROMAZINE	17	Permit PER81867 for the control of Liriomyza species, including: Vegetable Leafminer and Serpentine Leafminer	Australia: Reviewed in 2014. No current concerns. Permit PER81867 Expiry date: 30/09/2026 EU: Not approved Canada: No current review
DIAZINON	1B	Caterpillars	Australia: APVMA made a final decision on September 2024. Agricultural uses were not supported during the review. NO use of cancelled labels after 10 September 2025. Publication of Final Decision Codex: All MRLs deleted EU: Not approved Canada: No current review USA: Upcoming
FLONICAMID	29	Permit PER89185 for Thrips (Suppression)	Australia: No current concerns. Permit PER89185 Expiry date: 31/05/2027 EU: Approved Canada: No current review
FLUBENDIAMIDE	28	Helicoverpa	Australia: No current concerns. EU: Not approved UK: Withdrawn. Expiry date: 30/11/2024 Canada: No current review USA: No registrations

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Active Constituent	MoA Group	Pest	Risks and Comments
Helicoverpa Armigera NPV	31	Helicoverpa	Australia: No current concerns. EU: Approved
INDOXACARB	22A	Cotton bollworm (<i>H. armigera</i>) and Native budworm (<i>H. punctigera</i>)	Australia: No current concerns. EU: Not approved UK: Withdrawn. Expiry date: 31/08/2024 Canada: No registrations.
MALATHION	1B	Loopers	Australia: The final regulatory decision was published in an APVMA Special Gazette on 2 May 2024 . Labels containing malathion as an active constituent 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
METALDEHYDE	--	Slugs/snails	Australia: EU: Approved UK: Approved Canada: In review
METHIOCARB	1A	Slugs/snails	Australia: Reviewed in 2019. No current concerns. 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
PROPARGITE	12C	Spider mites	Australia: APVMA reconsideration. Prioritised to be commenced by 2029. EU: Not approved Canada: No current review USA: Review upcoming
SPINETORAM	5	Permit PER94451 for the control of Leaf miners	Australia: No current concerns. Permit PER94451 Expiry date: 31/07/2027 EU: Not approved UK: Withdrawn. Expiry date: 30/09/2024 Canada: In review
SPINOSAD	5	Helicoverpa. Permit PER94331 for the control of Dipteran leaf miners	Australia: Reviewed in 2014. No current concerns. Permit PER94331 Expiry date: 30/04/2026 EU: Approved UK: Approved Canada: In review
TRICHLORFON	1B	Cabbage white butterfly, cabbage moth, green vegetable bug, Rutherglen bug	Australia: APVMA nominated for reconsideration after 2029. Codex: No MRLs EU: Not approved Canada: No current review USA: Review upcoming

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FUNGICIDES – Disease Control

Active Constituent	MoA Group	Pest	Risks and Comments
CHLOROTHALONIL	M1	Permit PER82895 for the control of Downy Mildew and Purple Blotch (<i>Alternaria porri</i>)	Australia: APVMA reconsideration. Prioritised to be commenced by 2028. Permit PER82895 Expiry date: 31/05/2030 EU: Not approved Canada: In review USA: Review upcoming
COPPER	M3	Leaf diseases	Australia: No current concerns. EU: Approved, candidate for substitution. Canada: No current review
MANCOZEB	49	Leaf blight	Australia: APVMA reconsideration. Prioritised to be commenced by 2027. Codex MRL: To be reviewed EU: Not approved UK: Withdrawn. Expiry date: 31/05/2024 Canada: Most of uses cancelled USA: Review upcoming
OXATHIPIPROLIN	7	Downy Mildew	Australia: No current concerns. EU: Approved UK: Approved Canada: No current review
PENTHIOPYRAD	7	Sclerotinia rot (Lettuce drop), Grey mould, Powdery mildew.	Australia: No current concerns. 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

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HERBICIDES – Weed Control

Active Constituent	MoA Group	Risks and Comments
DIQUAT	22	<p><u>APVMA proposed decisions</u> published July 2024. Only uses up to 283gai/ha to be kept. Publication of the final regulatory decision is expected in <u>December 2025</u>.</p> <p>Codex: No MRLs. EU: Not approved (withdrawn in 2018). UK: Not approved. USA: Registered (under review).</p>
GLYPHOSATE	9	<p>Australia: APVMA nominated for reconsideration for targeted spray drift reconsideration EU: Approved UK: Approved Canada: No current review USA: Review upcoming </p>
PARAQUAT	22	<p><u>APVMA proposed decisions</u> July 2024. Only uses up to 231gai/ha to be kept. Publication of the final regulatory decision is expected in <u>December 2025</u>.</p> <p>Codex: No MRLs Canada: Not approved. EU and UK: Not approved (2007). USA: Restricted use (under review).</p>

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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