

Regulatory pressures on agrichemicals are increasing globally, with many being either restricted or withdrawn from use.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 a 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 blackberries and raspberries 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

INSECTS AND OTHER PESTS

| Active constituent | MoA group | Insects and other pests | Risks & Comments |
|----------------------------|-----------|---|---|
| Abamectin | 6 | Two-spotted (red spider) mite Fruit flies | Australia: APVMA nominated for reconsideration and spray drift assessment. EU: Approved. Canada: In review. |
| Acetamiprid + pyriproxyfen | 4A + 7C | Cotton seed bug (PER91601) Fruit flies (PER91601 – suppression only) Green potato bug (PER91601) Green vegetable bug (PER91601) Leafhoppers / plant hoppers (PER91601) Light brown apple moth (PER91601) Scale insects (PER91601) | PER91601 expires 31/03/2026. Acetamiprid: Australia: APVMA: Currently under review. Proposed regulatory decisions expected between Dec. 2025 to Oct. 2026. EU: Approved. UK: Approved. Canada: In review. USA: Upcoming review. Codex: Berries and other small fruits MRL set at 2 mg/kg (2012). Pyriproxyfen: EU: Approved. UK: Approved. Canada: No current review. |
| Afidopyropen | 9D | Green peach aphid (PER90178) Greenhouse whitefly (PER90178) | PER90178 expires 28/02/2027. Australia: No current concerns. EU: Not approved. UK: No registrations. Canada: No current review. USA: Approved. |
| Bifenazate | 20D | European red mite (PER14425) Two-spotted (red spider) mite (PER14425) | PER14425 expires 31/07/2028. EU: Approved. UK: Approved. Canada: In review. Codex: Blackberries MRL set at 7 mg/kg (2011). Codex: Raspberries MRL set at 7 mg/kg (2011). |
| Bifenthrin | 3A | Red-shouldered leaf beetle (PER84972) Plague thrips (PER84972) | PER84972 expires 30/11/2027. Australia: APVMA nominated for reconsideration. |

| | | | TH Makananana |
|----------------------------|-----|--------------------------------------|--|
| | | | EU: Not approved. |
| | | | Canada: No current review. |
| | | | Codex: Blackberries MRL set at 1 mg/kg (2011). |
| | | | Codex: Raspberries MRL set at 1 mg/kg (2011). |
| Carbaryl | 1A | Raspberry fruit caterpillar | Australia: No current concerns. |
| | | Weevils | EU: Not approved. |
| | | Armyworms (raspberries) | Canada: In review. |
| | | Grasshoppers (raspberries) | USA: Upcoming review. |
| | | Light brown apple moth (raspberries) | Codex: No MRLs. |
| | | Mealybugs (raspberries) | |
| | | Rutherglen bug (raspberries) | |
| | | Wingless grasshopper (raspberries) | |
| Dimethoate | 1B | Aphids | PER13859 expires 31/05/2030. |
| | | Jassids | Australia: APVMA reconsideration. Prioritised to be commenced by 2029. |
| | | Redlegged earth mite | EU: Not approved. |
| | | Rutherglen bug | Canada: In review. |
| | | Spider mite | USA: Upcoming review. |
| | | Strawberry bug | |
| | | Thrips | |
| | | Fruit flies (PER13859 – post-harvest | |
| | | orchard clean up) | |
| Emulsifiable botanical oil | - | Two-spotted (red spider) mite | PER14234 expires 31/05/2028. |
| | | (PER14234) | , = 1, 1, = 0, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, |
| Etoxazole | 10B | Bean spider mite (PER89406) | PER89406 expires 31/01/2026. |
| | | Two-spotted (red spider) mite | Australia: No current concerns. |
| | | (PER89406) | EU: Approved, candidate for substitution. |
| | | | UK: Approved. |
| | | | Canada: No current review |
| Fenbutatin oxide | 12B | Bean spider mite (PER89407) | PER89407 expires 28/02/2026. |
| | | Broad mite (PER89407) | Australia: APVMA nominated for reconsideration. |
| | | European red mite (PER89407) | EU: Not approved. |
| | | Red berry mite (PER89407) | Canada: In review. |
| | | Two-spotted (red spider) mite | USA: Upcoming review. |
| | | (PER89407) | Codex: To be reviewed by JMPR. |
| Fipronil | 2B | English (common) wasp (PER86492) | PER86492 expires 31/08/2026. |
| | | European wasp (PER89402 + PER86492) | PER89402 expires 30/04/2027. |
| | | | • |

| Flonicamid | 29 | Aphids (PER89214) Green vegetable bug (PER89214) Greenhouse whitefly (PER89214) Jassids (PER89214) Rutherglen bug (PER89214) | Australia: APVMA: Currently under review. Proposed regulatory decision expected by April 2026. EU: Not approved. USA: Upcoming review. Codex: Re-evaluation underway. PER89214 expires 28/02/2027. Canada: No current review. |
|--|-----|--|--|
| Helicoverpa NPV (nuclear polyhedrosis virus) | 31 | Helicoverpa species | Australia: No current concerns. EU: Approved. |
| Indoxacarb | 22A | Elephant weevil borer (PER13289) Light brown apple moth (product and PER13289) | PER13289 expires 31/05/2028. EU: Not approved. UK: Withdrawn. |
| Lambda-cyhalothrin | 3A | Fruit flies (PER12961 – SA biosecurity – soil drench) | PER12961 expires 31/03/2030. Australia: No current concerns. EU: Approved, candidate for substitution. UK: Approved. Canada: No current review. Codex: Berries and other small fruits MRL set at 0.2 mg/kg (2009). |
| Malathion | 1B | Fruit flies | 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. Canada: In review. USA: Upcoming review. Codex: Re-evaluation scheduled. |
| Metham present as sodium salt | - | Nematodes Symphylids | Australia: APVMA: no current concerns. |
| Orange oil (raspberries) | - | Silverleaf whitefly Two-spotted mite | Australia: No current concerns. EU: Approved. UK: Approved. Canada: No current review. |

| Permethrin | 3A | European wasp (PER85743) | PER85743 expires 31/03/2028. Australia: APVMA nominated for reconsideration. EU: Not approved. Canada: No current review. Codex: Blackberries MRL set at 1 mg/kg. Raspberries MRL set at 1 mg/kg. Codex: Re-evaluation scheduled. Support uncertain. |
|---------------|-----|---|--|
| Petroleum oil | UNM | Scale insects (PER13957) Two-spotted (red spider) mite (PER13957) | PER13957 expires 31/12/2027. Australia: No current concerns. |
| Pirimicarb | 1A | Aphids Green peach aphid (blackberries) | Australia: No current concerns. EU: Approved, candidate for substitution. UK: Approved. Canada: No current review. USA: No registrations. Codex: Berries and other small fruits MRL set at 1 mg/kg (2007). JMPR reevaluation scheduled. |
| Pyrethrins | 3A | Fruit flies Green stink bug (PER80070) Green vegetable bug (PER80070) Red-shouldered leaf beetle (PER80070) | PER80070 expires 31/10/2025. Australia: No current concerns. EU: Approved. UK: Approved. Canada: No current review. |
| Spinetoram | 5 | Helicoverpa species Light brown apple moth Loopers Western flower thrips Fruit flies (PER87408) | PER87408 expires 28/02/2029. Australia: No current concerns. EU: Not approved. UK: Withdrawn. Canada: In review. Codex: Raspberries MRL set at 0.8 mg/kg (2013). |
| Spinosad | 5 | Caterpillars Light brown apple moth Loopers Western flower thrips Fall armyworm (PER89870) | PER89870 expires 31/07/2025. Australia: Reviewed in 2014. No current concerns. EU: Approved. UK: Approved. Canada: In review. Codex: Blackberries MRL set at 1 mg/kg (2012). Codex: Raspberries MRL set at 1 mg/kg (2012). |
| Sulfoxaflor | 4C | Cotton seed bug (PER90208) | PER90208 expires 30/04/2027. Australia: No current concerns. |

| | | | EU: Approved. UK: Approved. Canada: No current review. |
|-------------|----|--|---|
| Sulfur | M2 | Bean spider mite (blackberries PER87245) Broad mite (blackberries PER87245) Red berry mite (blackberries PER87245) Two-spotted mite (blackberries PER87245) | PER87245 expires 28/02/2029. Australia: No current concerns. |
| Trichlorfon | 1B | Queensland and Mediterranean fruit flies (PER12486) | PER12486 expires 31/03/2026. Australia: APVMA nominated for reconsideration. EU: Not approved. Canada: No current review. USA: Upcoming review. |

OTHER

| Active constituent | MoA Group | Claim | Risks & Comments |
|---|-----------|----------------------------------|------------------|
| Copper (present as a buffered copper complex) | M1 | Barrier snail and slug repellent | |

DISEASES

| Active constituent | Chemical Group | Disease | Risks & Comments |
|-------------------------|----------------|-------------------------------|---------------------------------|
| Aureobasidium pullulans | NC | Anthracnose | |
| | | Botrytis flower and fruit rot | |
| | | Botrytis / grey mould | |
| | | Phomopsis fruit rot | |
| | | Rhyzopus fruit rot | |
| Agrobacterium | 1 | Crown gall (PER13150) | PER13150 expires 30/09/2027. |
| radiobacter | | | |
| Azoxystrobin | 11 | Anthracnose | Australia: No current concerns. |
| | | Botrytis / grey mould | EU: Approved. |
| | | Blossom blight | UK: Approved. |
| | | Cane spot | Canada: In review. |

| | | Caldostporium rot | Codex: Berries and other small fruits MRL set at 5 mg/kg (2009). |
|-----------------------------|--------|--|---|
| Bacillus amyloquefaciens | BM02 | Botrytis / grey mould (PER88058) | PER88058 expires 31/08/2027. |
| Boscalid + pyraclostrobin | 7 + 11 | Grey mould (PER82986) Anthracnose (PER82986) Alternaria leaf spot and fruit rot (PER82986) Leaf spot and blotch (PER82986) Monilinia blight (PER82986) Phomopsis (PER82986) Powdery mildew (PER82986) Rust – suppression only (PER82986) | PER82986 expires 30/06/2029. Boscalid: Australia: No current concerns. EU: Approved. UK: Approved. Canada: In review. Codex: Berries and other small fruits MRL set at 10 mg/kg (2010). Pyraclostrobin: EU: Approved. UK: Approved. Canada: In review. Codex: Blackberries MRL set at 3 mg/kg (2012). Codex: Raspberries MRL set at 3 mg/kg (2012). |
| Captan | M4 | Botrytis flower and fruit rot (PER13958) Cane spot (PER13958) Spur blight (PER13958) | PER13958 expires 31/08/2025. EU: Approved. UK: Approved. Canada: No current review. Codex: Raspberries MRL set at 20 mg/kg (2005). Review scheduled for 2025. |
| Chlorothalonil | M5 | Botrytis / grey mould (PER14449) Downy mildew (PER14449) Rust (PER14449) Septoria leaf spot (PER14449) | PER14449 expires 31/03/2027. Australia: APVMA reconsideration. Prioritised to be commenced by 2028. EU: Not approved. Canada: In review. USA: Upcoming review. |
| Copper | M1 | Downy mildew Spur blight Leaf diseases / spots (registered product and PER14443) Rust (registered product and PER14443) | PER14443 expires 31/10/2028. |
| Cyprodinil + fludioxonil | 9 + 12 | Botrytis / grey mould (PER14422) | PER14422 expires 31/07/2025. Cyprodinil: Australia: No current concerns. EU: Approved - candidate for substitution. UK: Approved. Canada: In review. Codex: Berries and other small fruits MRL set at 10 mg/kg (2014). Fludioxonil: Australia: No current concerns. |

| | | | EU: Approved - candidate for substitution. |
|-----------------|----------|----------------------------------|---|
| | | | UK: Approved. |
| | | | Canada: No current review. |
| | | | Codex: Blackberries MRL set at 5 mg/kg (2006). |
| | | | Codex: Raspberries MRL set at 5 mg/kg (2006). |
| Fenhexamid | 17 | Botrytis / grey mould | EU: Approved. |
| | | | UK: Approved. |
| | | | Canada: No current review. |
| | | | Codex: Blackberries MRL set at 15 mg/kg (2006). |
| | | | Codex: Raspberries MRL set at 15 mg/kg (2006). |
| Fluopyram + | 7 + 11 | Grey mould | Fluopyram: Australia: No current concerns. |
| trifloxystrobin | | | EU: Approved. |
| 3 | | | UK: Approved. |
| | | | Canada: No current review. |
| | | | Trifloxystrobin: Australia: No current concerns. |
| | | | EU: Approved. |
| | | | UK: Approved. |
| | | | Canada: In review. |
| lodine | М | Bactericide | Australia: No current concerns. |
| | | | Canada: No current review. |
| Iprodione | 2 | Botrytis / grey mould | Australia: No current concerns. |
| (boysenberry, | | | EU: Not approved. |
| raspberry and | | | Canada: Several food crop uses deleted. |
| youngberry) | | | USA: Upcoming review. |
| <i>ygy</i> | | | Codex: Review scheduled. |
| Isofetamid | 7 | Grey mould | EU: Approved. |
| | | c. cj modia | UK: Approved. |
| | | | Canada: No current review. |
| Mancozeb | M3 | Mildew (PER13958) | PER13958 expires 31/08/2025. |
| | | Botrytis / grey mould (PER13958) | Australia: APVMA reconsideration. Prioritised to be commenced by 2027. |
| | | Rust (PER13958) | EU: Not approved. |
| | | Rust (Litto750) | UK: Withdrawn. |
| | | | Canada: No current review. |
| | | | USA: Upcoming review. |
| | | | Codex: To be reviewed. |
| Mancozeb + | M3 + 4 | Downy mildew (PER84973) | PER84973 expires 31/12/2027. |
| metalaxyl-M | 1013 1 4 | Downy midew (Litto4775) | Mancozeb: Australia: APVMA reconsideration. Prioritised to be commenced by |
| Thetalaxyi-ivi | | | iviancozes. Australia. Ar vivia reconsideration. Frioritised to be confinenced by |

| | | | 2027. EU: Not approved. UK: Withdrawn. Canada: Most of uses cancelled. USA: Upcoming review. Metalaxyl-M: Australia: No current concerns. EU: Approved. UK: Approved. |
|-------------------------------|---------|---|---|
| Metalaxyl / Metalaxyl-M | 4 | Phytophthora (PER13958) Downy mildew (PER84973) | PER13958 expires 31/08/2025. PER84973 expires 31/12/2027. Metalaxyl: Australia: No current concerns. EU: Approved - candidate for substitution. UK: Approved. Canada: In review. Metalaxyl-M: EU: Approved. UK: Approved. |
| Metham present as sodium salt | - | Fungus diseases including rhizoctonia, pythium, fusarium, phytophthora, verticillium, sclerotinia and club root of crucifers. | Australia: APVMA: no current concerns. |
| Myclobutanil | 3 | Yellow rust (PER92308) | PER92308 expires 31/10/2025. Australia: APVMA nominated for reconsideration. EU: Not approved. UK: Withdrawn. Canada: In review. |
| Orange oil (raspberries) | - | Powdery mildew | Australia: No current concerns. EU: Approved. UK: Approved. Canada: No current review. |
| Oxathiapiprolin | 49 | Phytophthora root rot (PER91060 – hydroponic substrate or field grown) | PER91060 expires 31/10/2029. EU: Approved. UK: Approved. Canada: No current review. |
| Phosphorous acid | 33 | Phytophthora (PER13958) | PER13958 expires 31/08/2025. |
| Polyoxin D zinc salt | 19 | Grey mould | Canada: No current review. |
| J 2 | | Powdery mildew | |
| Propamocarb + | 28 + 43 | Downy mildew (PER93024) | PER93024 expires 31/08/2026. |

| fluopicolide | | | |
|------------------------------|--------|----------------------------------|--|
| Pydiflumetofen + fludioxonil | 7 + 12 | Grey mould (botrytis cinerea) | Pydiflumetofen: Australia: No current concerns. EU: Pending. UK: Approved. Canada: In review. Fludioxonil: Australia: No current concerns. EU: Approved, candidate for substitution. UK: Approved. Canada: No current review. Codex: Blackberries MRL set at 5 mg/kg (2006). |
| Pyrimethanil | 9 | Botrytis / grey mould (PER13958) | Codex: Raspberries MRL set at 5 mg/kg (2006). PER13958 expires 31/08/2025. EU: Approved. UK: Approved. Canada: In review. Codex: Blackberries MRL set at 15 mg/kg (2016). Codex: Raspberries MRL set at 15 mg/kg (2016). |
| Triadimenol | 3 | Powdery mildew (PER13958) | PER13958 expires 31/08/2025. Australia: APVMA nominated for reconsideration after 2029. EU: Not approved. Canada: No current review. |

WEEDS

| Active constituent | MoA Group | Weed | Risks & Comments |
|---|-----------|---|---|
| Carfentrazone-ethyl | 14 | Various broadleaf weeds. | EU: Approved. UK: Approved. Canada: In review. |
| Dichlobenil (raspberries) | 0 | Various broadleaf weeds and annual grasses. | EU: Not approved. Canada: In review. |
| Glufosinate- ammonium | 10 | Primocane and sucker control | Australia: APVMA: Nominated for targeted spray drift reconsideration (potential risk to vegetation, natural aquatic and bystander areas). Canada: In review. |
| Glufosinate- ammonium + carfentrazone-ethyl | 10 | Various broadleaf weeds and grasses. | Glufosinate-ammonium: Australia: <u>APVMA: Nominated for targeted</u> <u>spray drift reconsideration</u> (potential risk to vegetation, natural aquatic and bystander areas). |

| | | | Canada: In review. Codex: Raspberries MRL set at 0.1 mg/kg (2013). Carfentrazone-ethyl: EU: Approved. UK: Approved. Canada: In review. |
|-------------------------------|---|---|---|
| Glyphosate | 9 | Various annual and perennial weeds. | Australia: APVMA nominated for reconsideration for targeted spray drift reconsideration. EU: Approved. UK: Approved. Canada: No current review. USA: Upcoming review. |
| Metham present as sodium salt | - | Germinating weed seeds including winter grass, prince of Wales feather and fat hen. | Australia: APVMA: no current concerns. |
| Oryzalin | 3 | Various broadleaf weeds and grasses. | EU: Not approved. UK: Withdrawn. |
| Simazine | 5 | Various broadleaf weeds and grasses. | EU: Not approved. |

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 2025

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