

Artichoke Agrichemical Regulatory Risk Assessment

March 2024

Regulatory pressures on agrichemicals are increasing globally, with many being either restricted or withdrawn from use.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 with changed data requirements. A consequence of which can be that many agrichemicals are not meeting contemporary risk assessment standards as the necessary data is unavailable, or where data is available, the refined 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 so as 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. As a consequence it is possible that 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 the growing of artichokes, as well as current initiatives aimed at addressing identified pest management deficiencies.

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| | |
|-----------|---|
| R1 | Short-term: Critical concern over retaining access |
| R2 | Medium-term: Maintaining access of significant concern |
| R3 | Long-term: Potential issues associated with use - Monitoring required |

| Active Constituents | Chemical Group | Problem | Comment |
|-------------------------------|----------------|------------------------------------|--|
| INSECT AND OTHER PESTS | | | |
| Afidopyropen | 9D | Cabbage aphid | EU: No authorisations |
| | | Cotton aphid | UK: No authorisations |
| | | Currant lettuce aphid | |
| | | Green peach aphid | |
| | | Silverleaf white fly (suppression) | |
| <i>Bacillus thuringiensis</i> | 11C | Caterpillars | EU: Under review |
| Chlorpyrifos | 1B | Cutworms | APVMA: Proposed deletion of uses |
| | | Field crickets | Codex: All Codex MRLs deleted |
| | | Mole crickets | Canada: Cancellation of all uses. |
| | | Spotted vegetable weevil | EU: No authorisation |
| | | Vegetable weevil | UK: No authorisations |
| | | Wingless grasshopper | USA: EPA decision to cancel use on food crops |
| Cyromazine | 17 | Leafminer(PER81867) | EU: No authorisation in place |
| Diazinon | 1B | Caterpillars | APVMA: Proposed deletion of uses |
| | | Webworms | EU: No authorisation UK: No authorisations Codex: MRLs deleted |

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| Active Constituents | Chemical Group | Problem | Comment |
|--------------------------------|----------------|------------------|--|
| Flubendiamide | 28 | Helicoverpa spp. | EU: Authorisation expiry August 2024 |
| Helicoverpa NPV | 31 | Helicoverpa spp. | |
| Methiocarb | 1A | Snails and slugs | Canada: No authorisation EU: No authorisation |
| Pirimicarb | 1A | Aphids | Codex: JMPR re-evaluation scheduled EU: Candidate for substitution |
| Potassium salts of fatty acids | U1 | Aphids | |
| | | Thrips | |
| | | Mites | |
| | | Whitefly | |
| Propargite | 12C | Mites | APVMA: nominated for review EU: No authorisations UK: No authorisations USA: Under review |
| Pyrethrins | 3A | Ants | Canada: Under review |
| | | Aphids | |
| | | Caterpillars | |
| | | Leafhoppers | |
| | | Whiteflies | |

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|---------------------|----------------|-------------------------|---|
| Pyriproxyfen | 7C | Fire ants (PER87728) | |
| Spinetoram | 5 | Caterpillars | EU: Approval expiry June 2024 |
| | | Helicoverpa spp. | |
| | | Leafminers (PER91155) | |
| Spinosad | 5 | Leafminer(PER90928) | |
| Sulphur | UN | Mites | |
| Trichlorfon | 1B | Cabbage moth | APVMA: nominated for review |
| | | Cabbage white butterfly | Codex: No MRLs |
| | | Green vegetable bug | EU/UK: No authorisations |
| | | Rutherglen bug | USA: No MRLs |

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|---------------------------------------|----------------|-----------------------------|---|
| DISEASES | | | |
| Chlorothalonil | M5 | Grey mould | APVMA: nominated for review Canada: Cancellation of uses proposed EU/UK: No authorisation in place USA: Under review |
| Copper | M1 | Leaf diseases/spots Rust | EU: Candidate for substitution |
| Hydrogen peroxide + peroxyacetic acid | M | Bactericide | |
| Sulphur | M2 | Rust | |
| Thiram | M3 | Damping off | APVMA: nominated for review Canada: Cancelled all foliar uses Codex: To be reviewed EU/UK: No authorisation |

| Active Constituents | Chemical Group | Comment |
|---------------------|----------------|--|
| WEEDS | | |
| Diquat | 22 | APVMA: Currently under review EU/UK: No authorisation in place |
| Paraquat | 22 | APVMA: Currently under review Canada: Review initiated EU/UK: No authorisation in place Rotterdam Convention - nomination |
| Propyzamide | 3 | |

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