

Cherry Agrichemical Regulatory Risk Assessment

September 2023

Regulatory pressures on agrichemicals are increasing globally, with many being either restricted or withdrawn from use.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 chemicals 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 farm chemicals 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 prohibiting the use in the exporting country to ensure compliance, as breaches of MRLs would adversely affect market access.

The effects of the above are greater pressure placed on the availability and use of individual chemicals 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 cherries 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			
Acetamiprid + novaluron	4A + 15	Black peach aphid	Acetamiprid APVMA: Under review Novaluron: EU: No authorisations in place
		Fruit flies	
		Green peach aphid	
		Oriental fruit moth	
		San Jose scale	
		Light brown apple moth	
Bifenthrin	3A	Dried fruit beetle	Canada: Not authorised EU: Not authorised
		Carpophilus beetle(PER82062)	
		Brown marmorated stink bug (PER82374 Biosecurity permit)	
Chlorantraniliprole	28	Light brown apple moth	
		Oriental fruit moth	
		Fall armyworm (PER89259)	
Chlorpyrifos	1B	European earwig	APVMA: Under review Codex: Scheduled for review by JMPR Canada: Cancellation of all uses. EU: No authorisation in place USA: EPA decision to cancel use on food crops
		Light brown apple moth	
		Queensland fruit fly	
		San Jose scale	
		Locusts(PER11843)	

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Active Constituents	Chemical Group	Problem	Comment
Clofentezine	10A	Bryobia mite	EU: No authorisation
		European red mite	
		Two-spotted (Red spider) mite	
Clothianidin	4A	Fruit flies	APVMA: Under review Canada: Field uses cancelled or amended EU: Not authorised USA: Re-registration with new risk mitigation measures
<i>Cydia pomonella</i> granulosis virus	31	Oriental fruit moth	
Deltamethrin/MagMED	3A	Mediterranean fruit fly(PER90359 – WA) Use as trap toxicant	
Diazinon	1B	Green peach aphid	APVMA: Under review EU: No authorisation in place Codex: Withdrawal of Codex MRLs recommended
		San Jose scale	
		Black Cherry aphid (PER84533)	
Dimethoate	1B	Fruit flies(PER13859) Post-harvest orchard clean-up	Codex: MRL deletion recommended. EU: Not authorised
Etoxazole	10B	Two-spotted (Red spider) mite	EU: Only uses on greenhouse ornamentals approved & Candidate for substitution
Fenitrothion	1B	Locusts	EU: No authorisation in place
		Small plague grasshopper	
		Wingless grasshopper	
Fipronil	2B	European earwig	APVMA: Under review Codex: Re-evaluation completed, many MRLs withdrawn EU: No authorisation in place USA: Under review
Hexythiazox	10A	European red mite	
		Two-spotted (Red spider) mite	
Imidacloprid	4A	Black peach aphid	APVMA: Under review Canada: Field uses cancelled or amended EU: No authorisation. Grace period end June 2022 USA: Re-registration with new risk mitigation measures
		Green peach aphid	
		Pear and cherry slug	

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Active Constituents	Chemical Group	Problem	Comment
Indoxacarb	22A	European earwig(PER11002)	Canada: No authorisation EU: No authorisation UK: No authorisation
Lambda-cyhalothrin	3A	Fruit flies(PER12961 – SA Biosecurity) (Soil drench)	EU: Candidate for substitution
Malathion/Maldison	1B	Fruit flies	APVMA: Under review Codex: Re-evaluation scheduled for 2023/24 EU: Restricted use to permanent greenhouses
		Black peach aphid	
		Cherry aphid	
		European red mite	
		Green peach aphid	
		Oriental fruit moth	
		Rutherglen bug	
		Wingless grasshopper	
Methomyl	1A	Locusts(PER11843)	APVMA: nominated for review Canada: Re-evaluation completed. Majority of uses removed EU: No authorisations in place USA: Under review
		Green peach aphid	
		Helicoverpa	
		Red-shouldered leaf beetle	
Milbemectin	6	Thrips	
Paraffinic/petroleum oil	UNM	Two-spotted (Red spider) mite	
		Bryobia mite	
		European red mite	
		Mites	
		San Jose scale	
		Scale insects (Frosted, Oystershell & pear)	
		Spider mites	
Two-spotted (Red spider) mite			
Pirimicarb	1A	Two-spotted (Red spider) mite	Codex: JMPR re-evaluation scheduled EU: Candidate for substitution
		Black peach aphid	
		Cherry aphid	
		Green peach aphid	

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Active Constituents	Chemical Group	Problem	Comment
Propargite	12C	European red mite	APVMA: nominated for review EU: No authorisations
		Mites	
		Two-spotted (Red spider) mite	
Pymetrozine	9B	Black peach aphid	Canada: Restricted use to glasshouses only Codex: No registrant support EU: Not authorised
		Green peach aphid	
Pyrethrins	3A	Black citrus aphid	Canada: Under review
		Caterpillars	
		Fruit flies	
		Green peach aphid	
		Greenhouse whitefly	
		Light brown apple moth	
		Pear and cherry slug	
		Plague thrips	
Rutherglen bug			
Spinetoram	5	Caterpillars	
		Light brown apple moth	
		Oriental fruit moth	
		Pear and cherry slug	
		Western flower thrips	
		Fruit flies(PER12590)	
Spinosad	5	Light brown apple moth	
		Oriental fruit moth	
		Pear and cherry slug	
		Western flower thrips	

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Active Constituents	Chemical Group	Problem	Comment
Spirotetramat	23	Black peach aphid	
		Cherry aphid	
		Longtailed Mealybugs	
		San Jose scale	
		Tuber mealybug	
		Western flower thrips(PER84804)	
Sulfoxaflor	4C	Apple dimpling bug	USA: Pollinator concerns EU: Restricted to permanent glasshouses only
		Black peach aphid	
		Cherry aphid	
		Green peach aphid	
Sulfur	UN	San Jose scale	
Tau-fluvalinate	3A	Plague thrips	
Thiacloprid	4A	Green peach aphid	APVMA: Under review EU: No authorisation in place USA: No authorisation
		Oriental fruit moth	
		Mediterranean fruit fly(PER14562)	
Trichlorfon	1B	Rutherglen bug	APVMA: nominated for review Codex: No MRLs EU: No authorisations
		Queensland fruit fly	
		Fruit flies(PER80542)	

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Active Constituents	Chemical Group	Problem	Comment
DISEASES			
<i>Agrobacterium radiobacter</i>		Crown gall	
<i>Bacillus amyloquefaciens</i>	BM02	Bacterial canker/blast (PER88559)	
		Bacterial spot (PER88559)	
		Blossom blight(PER88559)	
		Brown spot (Alternaria) (PER88559)	
		Grey mould (Botrytis) (PER88559)	
BLAD	BM01	Blossom blight	
		Brown rot	
Captan	M4	Blossom blight	EU: Under review proposed restriction to use in permanent greenhouses only USA: Under review
		Brown rot	
Chlorothalonil	M5	Blossom blight	APVMA: nominated for review Canada: Proposed cancellation of all use EU: No authorisation in place USA: Under review
		Brown rot	
		Freckle and scab	
		Rust	
		Shot hole	
		Transit rot	
Copper	M1	Bacterial canker/blast	EU: Candidates for substitution
		Bacterial spot	
		Blossom blight	
		Brown rot	
		Freckle and scab	
		Leaf curl	
		Rust	
		Shot hole	

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Active Constituents	Chemical Group	Problem	Comment
Dithianon	M9	Brown rot	EU: Restricted use to non-edible crops
		Freckle and scab	
		Shot hole	
Fenhexamid (PER88787)	17	Grey mould (Botrytis)	
Fludioxonil (Po)	12	Brown rot	EU: Under review & candidate for substitution
		Grey mould (Botrytis)	
		Transit rot	
Fluopyram + trifloxystrobin	7 + 11	Blossom blight	<u>Trifloxystrobin</u>
		Brown rot	Canada: Under review
		Shot hole	
Fluxapyroxad + pyraclostrobin	7 + 11	Blossom blight	<u>Pyraclostrobin</u> Canada: Review initiated
Iprodione	2	Blossom blight	Canada: Majority of food crop uses deleted Codex: Review scheduled EU: No authorisation in place USA: Proposed deletion or restriction of uses
		Brown rot	
		Transit rot	
Mancozeb	M3	Blossom blight	APVMA: nominated for review Canada: Many uses cancelled Codex: To be reviewed 2023/24 EU: Authorisation not renewed
		Brown rot	
		Freckle and scab	
		Rust	
		Shot hole	
Mandestrobin	11	Blossom blight	
		Brown rot	
Metiram	M3	Rust	APVMA: nominated for review Canada: All foliar uses other than potato, cancelled Codex: To be reviewed 2023/24 EU: Under review
		Shot hole	

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Active Constituents	Chemical Group	Problem	Comment
Penthiopyrad	7	Blossom blight	
		Brown rot	
		Freckle and scab	
Procymidone	2	Blossom blight	APVMA: Review in progress Codex: No MRLs EU: No authorisations
Propiconazole	3	Blossom blight	APVMA: nominated for review EU: No authorisations USA: Under review
		Brown rot	
Sulfur	M2	Freckle and scab	
		Rust	
		Blossom blight	
Tebuconazole	3	Silverleaf	APVMA: nominated for review Canada: Under review EU: Candidate for substitution USA: Under review
Thiram	M3	Brown rot	APVMA: nominated for review Canada: Cancelled all foliar uses (2021) Codex: To be reviewed 2023/24 EU: No authorisation in place
		Freckle and scab	
		Shot hole	
Triforine	3	Brown rot	APVMA: nominated for review Canada: Review completed 2019 – use acceptable EU: No authorisation
Ziram	M3	Blossom blight	APVMA: nominated for review Canada: Cancelling of all uses Codex: To be reviewed 2023/24 EU: Candidate for substitution
		Brown rot	
		Freckle and scab	
		Leaf curl	
		Shot hole	

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Active Constituents	Chemical Group	Comment
WEEDS		
2,2-DPA	0	EU: No authorisations in place
2,4-D	4	
Carfentrazone-ethyl	14	
Diquat	22	APVMA: Currently under review EU: No authorisation in place
Fluazifop-P	1	
Flumioxazin	14	EU: Candidate for substitution
Glufosinate-ammonium	9	Canada: Review proposed EU: No authorisation in place
Glyphosate	10	Ongoing issues internationally EU: Under review
Haloxyfop-P	1	EU: No authorisation
Isoxaben	29	
Napropamide	0	
Norflurazon	12	EU: No authorisation
Oryzalin	3	EU: No authorisation
Oxyfluorfen	14	EU: Candidate for substitution
Paraquat	22	APVMA: Currently under review Canada: Review initiated EU: No authorisation in place Rotterdam Convention - nomination
PLANT GROWTH REGULATORS		
6-benzyladenine		
AVG as HCl salt		EU: No authorisation
Ethephon		
Fatty acid esters-canola		
Gibberellic acid		
Paclobutrazol		EU: Candidate for substitution
Prohexadione-calcium		

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