

Nashi 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Regulatory pressures on agrichemicals are increasing globally, with many being either restricted or withdrawn from use.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 could 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 available for use 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, diseases and weeds in nashi.

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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	Comments
Abamectin +chlorantraniliprole	6 + 28	Codling moth	<u>Abamectin</u> APVMA: Nominated for spray drift label review Canada: Some uses amended, & use in greenhouse gown cut flowers cancelled EU: Use restricted to permanent greenhouses
		Helicoverpa species	
		Lightbrown apple moth	
		Oriental fruit moth	
		Two-spotted (Red spider) mite	
Chlorantraniliprole	28	Codling moth	
		Helicoverpa species	
		Lightbrown apple moth	
		Oriental fruit moth	
Chlorpyrifos	1B	Wingless grasshopper	<u>APVMA: Under review.</u> 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
		Queensland fruit fly(Bait spray)	
		Australian plague locust, Migratory locust & Spur-throated locust(PER11843)	
Clofentezine	10A	European red mite	EU: No authorisation
		Two-spotted (Red spider) mite	
Clothianidin	4A	Fruit flies	<u>APVMA: Under review</u> Canada: Field uses cancelled or amended EU: Not authorised USA: Re-registration with new risk mitigation measures

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Active Constituents	Chemical Group	Problem	Comments
Copper	UN	Snails	EU: Candidate for substitution
<i>Cydia pomonella</i> granulosis virus	31	Codling moth	
		Oriental fruit moth	
Dimethoate	1B	Fruit flies(PER13859) (After harvest orchard clean-up spray)	Codex: No MRL. EU: Not authorised
Etoxazole	10B	European red mite	EU: Only uses on greenhouse ornamentals approved & Candidate for substitution
		Two-spotted (Red spider) mite	
Helicoverpa NPV	31	Helicoverpa species	
Indoxacarb	22A	Apple weevil	Canada: No authorisations EU: Authorisation not renewed. Grace period expired September 2022 UK: Proposed non-renewal
		Codling moth	
		Fuller's rose weevil	
		Garden weevil	
		Helicoverpa species	
		Lightbrown apple moth	
Wingless grasshopper			
Lambda-cyhalothrin	3A	Fruit flies(PER12961 – SA Biosecurity) (Soil drench)	EU: Candidate for substitution
Malathion/Maldison	1B	Wingless grasshopper	APVMA: Under review Codex: Re-evaluation scheduled for 2023/24 EU: Restricted use to permanent greenhouses
		Fruit flies	
		Australian plague locust, Migratory locust & Spur-throated locust (PER11843)	

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Active Constituents	Chemical Group	Problem	Comments
Methoxyfenozide	18	Lightbrown apple moth	EU: Proposed restricted authorisation & Candidate for substitution
		Loopers	
Milbemectin	6	European red mite	
		Two-spotted (Red spider) mite	
NPV	31	Helicoverpa spp.	
Paraffinic oil/Petroleum oil	UNM	European red mite	
		Frosted scale	
		Oystershell scale	
		San Jose scale	
		Spider mites	
		Two-spotted (Red spider) mite	
		Pear scale	
Pyrethrins	3A	Fruit flies	Canada: Under review
Pyridaben	21A	Two-spotted (Red spider) mite	
Spinetoram	5	Caterpillars	
		Codling moth	
		Helicoverpa species	
		Lightbrown apple moth	
		Loopers	
		Oriental fruit moth	
		Pear and cherry slug	
		Western flower thrips	
		Fruit flies (PER12590)	

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Active Constituents	Chemical Group	Problem	Comments
Spinosad	5	Helicoverpa species	
		Lightbrown apple moth	
		Loopers	
		Pear and cherry slug	
		Western flower thrips	
		Fall armyworm(PER89870)	
Spirotetramat	23	Longtailed mealybug	
		Longtailed mealybug	
		San Jose scale	
		Tuber mealybug	
		Woolly aphid	
Sulfoxaflor	4C	Apple dimpling bug(Yellow mirid)	USA: Pollinator concerns EU: Restricted to permanent glasshouses only
		Longtailed mealybug	
		Longtailed mealybug	
		San Jose scale	
		Tuber mealybug	
		Woolly aphid	
Thiacloprid	4A	Codling moth	APVMA: Under review EU: No authorisation in place USA: No authorisation
		Mediterranean fruit fly	
		Oriental fruit moth	
		Woolly aphid	
Trichlorfon	1B	Rutherglen bug	APVMA: nominated for review Codex: No MRLs EU: No authorisations USA: No MRLs
		Fruit flies(Cover spray and Bait spray)	

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Active Constituents	Chemical Group	Problem	Comments
DISEASES			
Chlorine	M	Surface diseases and pests (PER10822)	
Copper	M1	Bitter rot	EU: Candidates for substitution
		Black spot	
Fludioxonil	12	Blue mould	EU: Under review & candidate for substitution
		Grey mould	
Iodine (Po)	M	Bactericide	
Iprodione	2	Blue & green moulds	Canada: Majority of food crop uses deleted Codex: Review scheduled EU: No authorisation in place USA: Proposed deletion or restriction of uses
		Botrytis blight	
		Ripe fruit rot	
		Storage rot	
Mancozeb	M3	Bitter rot	APVMA: nominated for review Canada: Many uses cancelled Codex: To be reviewed 2024/25 EU: Authorisation not renewed
		Black spot	
		Fly speck	
		Ripe fruit rot	
		Sooty blotch	
		Target spot (Early blight)	
Penthiopyrad	7	Black spot	
		Powdery mildew	
Sulfur	M2	Black spot	
		Powdery mildew	
Zineb	M3	Bitter rot	APVMA: nominated for review Codex: To be reviewed 2024/25 EU: No authorisation in place
		Black spot	
		Sooty blotch	
Diphenylamine		Scald inhibitor	

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Active Constituents	Chemical Group	Comment
WEEDS		
Carfentrazone-ethyl	14	
Flumioxazin	14	EU: Candidate for substitution
Glufosinate	10	Canada: Review proposed EU: No authorisation in place
Glyphosate	9	Ongoing issues internationally EU: Under review
Haloxyfop-P	1	EU: Candidate for substitution
Nonanoic acid	0	
Oryzalin	3	EU: No authorisation
Oxyfluorfen	14	EU: Candidate for substitution USA: Interim review decision Label amendments proposed
Paraquat	22	APVMA: Currently under review Canada: Review initiated EU: No authorisation in place Rotterdam Convention - nomination
Saflufenacil	14	EU: No authorisation in place

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Funding statement: MT20007–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.

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