

Okra 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Regulatory pressures on agrichemicals are increasing globally, with many being either restricted or withdrawn from use.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 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 okra, 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	Comments
Abamectin	6	Potato moth	APVMA: Nominated for spray drift label review Canada: Some uses amended EU: Use restricted to permanent greenhouses
		Tomato Red spider mite	
		Tomato russet mite	
		Tomato/ potato psyllid	
		Two-spotted (Red spider) mite	
		Vegetable leafminer(PER81876)	
Afidopyropen	9D	Cabbage aphid	EU: No authorisations
		Cotton aphid	
		Currant and lettuce aphid	
		Green peach aphid	
		Silverleaf (Poinsettia) whitefly	
Alpha-cypermethrin	3A	Mediterranean fruit fly(PER80099)	EU: No authorisations UK: No authorisations
		Queensland fruit fly(PER80099)	
Bifenazate	20D	Bryobia mite	Canada: Review initiated EU: Use restricted to non-edible crops in permanent greenhouses.
		Two-spotted (Red spider) mite	
Chlorantraniliprole	28	Eggfruit caterpillar	
		Helicoverpa	
		Potato moth	

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Active Constituents	Chemical Group	Problem	Comments
Chlorantranilprole + thiamethoxam	28 + 4A	Tomato thrips	<p>Thiamethoxam APVMA: Under review Canada: Some field uses cancelled or amended EU: Not authorised USA: Re-registration with new risk mitigation measures</p>
		Cluster caterpillar	
		Green peach aphid	
		Greenhouse whitefly	
		Helicoverpa	
		Potato moth	
		Silverleaf (Poinsettia) whitefly	
		Western flower thrips	
Clothianidin	4A	Mediterranean fruit fly (PER80100)	<p>APVMA: Under review Canada: Field uses cancelled or amended EU: Not authorised USA: Re-registration with new risk mitigation measures</p>
		Queensland fruit fly(PER80100)	
Cyantranilprole	28	Green peach aphid	
		Helicoverpa	
		Potato moth	
		Silverleaf (Poinsettia) whitefly	
		Tomato thrips	
		Western flower thrips	
		Tomato/ potato psyllid(PER84805)	
		Vegetable leafminer (PER90387)	

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Active Constituents	Chemical Group	Problem	Comments
Cyantranilprole + diafenthiuron	28 + 12A	Cluster caterpillar	<u>Diafenthiuron</u> Codex: No MRLs EU: No authorisation in place
		Green peach aphid	
		Helicoverpa	
		Potato moth	
		Silverleaf (Poinsettia) whitefly	
		Tomato thrips	
		Two-spotted (Red spider) mite	
		Western flower thrips	
Cyromazine	17	Vegetable leafminer(PER81867)	EU: No authorisation
Dimpropridaz	36	Greenhouse whitefly	Codex: Evaluation for MRLs scheduled for 2025
		Silverleaf whitefly	EU: Authorisation pending
Emamectin benzoate	6	Cluster caterpillar	EU: Candidate for substitution
		Helicoverpa	
Fluazaindolizine	N-UN	Root-knot nematodes	EU: Pending
Flubendiamide	28	Helicoverpa	
		Potato moth	
Fluensulfone	-	Root-knot nematodes	EU: No authorisations
Helicoverpa NPV	31	Helicoverpa	
Hexythiazox	10A	Broad mite (PER14765)	
		Tomato Red spider mite (PER14765)	
		Tomato russet mite (PER14765)	
		Two-spotted (Red spider) mite (PER14765)	
Imidacloprid	4A	Silverleaf (Poinsettia) whitefly(PER12351)	APVMA: Under review Canada: Field uses cancelled or amended EU: No authorisation USA: Re-registration with new risk mitigation measures

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Active Constituents	Chemical Group	Problem	Comments
Malathion/Maldison	1B	Aphids	APVMA: Under review Codex: Re-evaluation scheduled for 2025/26 EU: Restricted use to permanent greenhouses
		Loopers	
Methomyl	1A	Cluster caterpillar	APVMA: nominated for review Canada: Re-evaluation completed. Majority of uses removed EU: No authorisations in place USA: Under review
		Cucumber moth (PER82428)	
		Helicoverpa (PER82428)	
		Loopers (PER82428)	
		Rutherglen bug (PER82428)	
		Thrips (PER82428)	
		Webworms (PER82428)	
		Western flower thrips (PER82428)	
Methoxyfenozide	18	Cluster caterpillar	EU: Proposed restricted authorisation & Candidate for substitution
		Helicoverpa	
		Tomato grub	
Methyl bromide	8A	Post-harvest disinfestation (PER80718)	
Petroleum oil	UNM	Greenhouse whitefly(PER12221)	
		Silverleaf (Poinsettia) whitefly(PER12221)	
Pirimicarb	1A	Aphids	Codex: JMPR re-evaluation scheduled EU: Candidate for substitution
Pyriproxyfen	7C	Greenhouse whitefly	
		Silverleaf (Poinsettia) whitefly	
		Red imported fire ants (PER85163 Qld only)	

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Active Constituents	Chemical Group	Problem	Comments
Spinetoram	5	Helicoverpa	
		Potato moth	
		Tomato grub	
		Western flower thrips	
		Tomato/ potato psyllid (PER84757)	
		Vegetable leafminer(PER91155)	
Spinosad	5	Helicoverpa	
		Potato moth	
		Western flower thrips	
		Fall armyworm(PER89870)	
		Vegetable leafminer (PER90928)	
<i>Spodoptera frugiperda</i> NPV	31	Fall armyworm(PER90820)	
Sulfoxaflor	4C	Green peach aphid	USA: Pollinator concerns EU: Restricted to permanent glasshouses only
		Greenhouse whitefly	
		Tomato/ potato psyllid	
Sulphur	M2	Tomato russet mite	
		Two-spotted (Red spider) mite	

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Active Constituents	Chemical Group	Problem	Comments
DISEASES			
Chlorothalonil	M5	Leaf diseases/spots	APVMA: nominated for review Canada: Cancellation of uses proposed EU: No authorisation in place USA: Under review
Hydrogen peroxide + peroxyacetic acid	M	Bactericide (Post-harvest)	
Iodine	M	Bactericide (Post-harvest)	
Mancozeb	M3	Alternaria (PER14593)	APVMA: nominated for review Canada: Many uses cancelled Codex: To be reviewed 2024/25 EU: Authorisation not renewed
		Anthracoze (PER14593)	
		Downy mildew (PER14593)	
Penthiopyrad	7	Grey mould	
		Powdery mildew	
		Target leafspot	
<i>Streptomyces lydicus</i>	BM02	Powdery mildew	
Sulfur	M2	Powdery mildew	

Active Constituents	Chemical Group	Comment
WEEDS		
Diquat	22	APVMA: Currently under review EU: No authorisation in place
Paraquat	22	APVMA: Currently under review EU: No authorisation in place Rotterdam Convention: nomination
Plant growth regulators		
Paclobutrazol (PER85896 seedlings/nursery)		EU: Candidate for substitution

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