

Eggplant 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Regulatory pressures on agrichemicals are increasing globally, with many being either restricted or withdrawn from use.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 that requiring 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 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 eggplants.

Eggplant Agrichemical Regulatory Risk Assessment

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
INSECT AND OTHER PESTS			
Abamectin	6	Root-knot nematodes	APVMA: Nominated for spray drift label review
		Two-spotted (Red spider) mite	Canada: Some uses amended
		Western flower thrips	EU: Use restricted to permanent greenhouses
		Vegetable leafminer (<i>Liriomyza spp.</i>) (PER81876)	
		Tomato potato Psyllid (PER84229)	
Afidopyropen	9D	Cabbage aphid	EU/UK: No authorisations
		Cotton aphid	
		Currant lettuce aphid	
		Green peach aphid	
		Silver leaf whitefly	
Alpha-cypermethrin	3A	Queensland fruit fly(PER80099)	EU: No authorisation UK: No authorisation
<i>Bacillus thuringiensis israeliensis</i>	11A	Fungus gnats(PER14694)	EU: Under review
Bifenazate	20D	Bryobia mite	Canada: Review initiated
		Red tomato spider mite	EU: Use restricted to non-edible crops in permanent greenhouses.
		Two-spotted (Red spider) mite (PER82341)	
Buprofezin	16	Cotton (Sweet Potato) whitefly(PER82467)	EU: MRLs set to limit of quantification
		Greenhouse whitefly(PER82467)	
		Silver leaf whitefly(PER82467)	

Eggplant Agrichemical Regulatory Risk Assessment

Active Constituents	Chemical Group	Problem	Comments
Chlorantraniliprole	28	Eggfruit caterpillar	
		Helicoverpa	
		Potato moth (Leafminer)	
Chlorantraniliprole + thiamethoxam	4A + 28	Silver leaf whitefly	Thiamethoxam APVMA: Under review
		Cluster caterpillar	Canada: Some field uses cancelled or amended
		Green peach aphid	EU/UK: Not authorised
		Greenhouse whitefly	USA: Re-registration with new risk mitigation measures
		Helicoverpa	
		Potato moth (Leafminer)	
		Tomato thrips	
		Western flower thrips	
Chlorpyrifos	1B	Black field cricket	APVMA: Proposed deletion of uses
		Cutworms	Codex: All Codex MRLs deleted
		Field crickets	Canada: Cancellation of all uses.
		Mole crickets	EU/UK: No authorisation in place
		Spotted vegetable weevil	USA: EPA decision to cancel use on food crops
		Vegetable weevil	
		Wingless grasshopper	
Clothianidin	4A	Mediterranean fruit fly	APVMA: Under review
		Queensland fruit fly	Canada: Field uses cancelled or amended EU/UK: Not authorised USA: Re-registration with new risk mitigation measures

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Cyantraniliprole	28	Green peach aphid	
		Helicoverpa	
		Potato moth (Leafminer)	
		Silver leaf whitefly	
		Tomato thrips	
		Tomato potato psyllid (PER84805)	
		Western flower thrips	
		Vegetable leafminer (<i>Liriomyza spp.</i>) (PER90387)	
Cyromazine	17	Liriomyza spp. (PER81867)	EU/UK: No authorisation
Diazinon	1B	Cutworms	APVMA: Proposed deletion of uses EU: No authorisation in place Codex: Withdrawal of Codex MRLs recommended
Dimethoate	1B	Aphids	Codex: No MRLs.
		Green vegetable bug	EU: Not authorised
		Jassids	UK: Not authorised
		Leafhoppers	
		Mites	
		Thrips	
		Wingless grasshopper	
		Mediterranean fruit fly (PER12506)	
		Queensland fruit fly (PER12506)	
Dimpropridaz	36	Greenhouse whitefly	EU: Authorisation pending
		Silverleaf whitefly	
Emamectin benzoate	6	Helicoverpa	EU: Candidate for substitution
		Cluster caterpillar	
Etoxazole	10B	Two-spotted (Red spider) mite	EU: Only uses on greenhouse ornamentals approved & Candidate for substitution
Fonicamid	29	Green peach aphid(PER90346)	
Fluazaindolizine	N-UN	Root-knot nematodes	EU: Pending
Flubendiamide	28	Helicoverpa	EU: Authorisation expiry August 2024
		Potato moth (Leafminer)	
Fluensulfone	5	Root-knot nematodes	EU/UK: Not authorised

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Flupyradifurone	4D	Cabbage aphid	EU: Under review
		Green peach aphid	
		Greenhouse whitefly	
		Silver leaf whitefly	
Helicoverpa NPV	31	Helicoverpa	
Imidacloprid	4A	Green peach aphid	APVMA: Under review
		Melon thrips	Canada: Field uses cancelled or amended
		Silver leaf whitefly	EU/UK: No authorisation USA: Re-registration with new risk mitigation measures
Indoxacarb	22A	Helicoverpa	Canada: No authorisations
		Potato moth (Leafminer)	EU: Authorisation not renewed. Grace period expired September 2022 UK: Proposed non-renewal
Isocloseram	30	Two-spotted mite	EU/UK: No authorisation
		Broad mite	
		Thrips (Suppression)	
		Heliothis (Suppression)	
Methomyl	1A	Cluster caterpillar (PER82428)	APVMA: nominated for review
		Cucumber moth (PER82428)	Canada: Re-evaluation completed. Majority of uses removed
		Helicoverpa (PER82428)	EU/UK: No authorisations in place
		Loopers (PER82428)	USA: Under review
		Rutherglen bug (PER82428)	
		Thrips (PER82428)	
		Webworms(PER82428)	
		Western flower thrips (PER82428)	

Eggplant Agrichemical Regulatory Risk Assessment

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Methoxyfenozide	18	Cluster caterpillar	EU: Proposed restricted authorisation & Candidate for substitution
		Helicoverpa	
		Tomato grub	
Milbemectin	6	Two-spotted (Red spider) mite	
Petroleum oil	-	Greenhouse whitefly	
		Silver leaf whitefly	
		Aphids(PER12221)	
		Green mirid(PER12221)	
		Green vegetable bug(PER12221)	
		Grey cluster bug(PER12221)	
		Leafhoppers(PER12221)	
		Mites(PER12221)	
		Rutherglen bug(PER12221)	
		Thrips(PER12221)	
Phorate	1B	Aphids(PER8930)	APVMA: nominated for review
		Jassids(PER8930)	Canada: Under review
		Mites(PER8930)	EU: No authorisation in place
		Thrips(PER8930)	
Pirimicarb	1A	Aphids	Codex: JMPR re-evaluation scheduled EU: Candidate for substitution
Pymetrozine	9B	Green peach aphid	Canada: Restricted use to glasshouses only
		Greenhouse whitefly	Codex: No registrant support
		Potato aphid	EU/UK: Not authorised
		Silver leaf whitefly	
Pyriproxyfen	7C	Greenhouse whitefly	
		Silver leaf whitefly	

Eggplant Agrichemical Regulatory Risk Assessment

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Spinetoram	5	Helicoverpa	EU: Authorisation expiry June 2024
		Potato moth (Leafminer)	
		Tomato grub	
		Western flower thrips	
		Melon thrips(PER14186)	
		Vegetable leafminer (<i>Liriomyza spp.</i>) (PER91155)	
Spinosad	5	Helicoverpa	
		Potato moth (Leafminer)	
		Western flower thrips	
		Fall armyworm(PER89870)	
		Vegetable leafminer (<i>Liriomyza spp.</i>) (PER90928)	
Spirotetramat	23	Green peach aphid	EU: Authorisation expiry April 2024
		Silver leaf whitefly	
		Tomato potato Psyllid(PER84245)	
		Vegetable leafminer (<i>Liriomyza spp.</i>) (PER88640)	
Spodoptera (NPV)	31	Fall armyworm(PER90820)	
Sulfoxaflor	4C	Green peach aphid	USA: Pollinator concerns
		Greenhouse whitefly	EU: Restricted to permanent glasshouses only
		Rutherglen bug	
		Tomato potato Psyllid	
Trichlorfon	1B	Green vegetable bug	APVMA: nominated for review
		Rutherglen bug	Codex: No MRLs
		Mediterranean fruit fly(PER80717)	EU/UK: No authorisations
		Queensland fruit fly(PER80717)	USA: No MRLs

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Active Constituents	Chemical Group	Problem	Comments
DISEASES			
<i>Aureobasidium pullulans</i>	NC	Grey mould	
<i>Bacillus amyloquefaciens</i>	NC	Botrytis grey mould (PER88032)	Canada: Review completed. Continued use
		Early blight (PER88032)	
		Powdery mildew (PER88032)	
		Bacterial spot (PER88032)	
Boscalid	7	Target spot (Early blight)	Canada: Under review
Bupirimate	8	Powdery mildew	
Chlorothalonil	M5	Alternaria spot(PER82895)	APVMA: nominated for review
		Downy mildew(PER82895)	Canada: Cancellation of uses proposed
		Grey leaf spot(PER82895)	EU/UK: No authorisation in place
		Grey mould(PER82895)	USA: Under review
Copper	M1	Bacterial canker(PER14038)	EU: Candidates for substitution
		Bacterial speck(PER14038)	
		Bacterial spot(PER14038)	
Hydrogen peroxide + peroxyacetic acid	M	Powdery mildew	
Iodine	M	Bactericide	
		Fungi	
Iprodione	2	Grey mould(PER80910)	Canada: Majority of food crop uses deleted Codex: No MRL EU/UK: No authorisation in place USA: Proposed deletion or restriction of uses
Mancozeb	M3	Alternaria leaf spots (PER14593)	APVMA: nominated for review
		Anthrachnose (PER14593)	Canada: Many uses cancelled
		Downy mildew (PER14593)	Codex: To be reviewed
		Target spot (Early blight)	EU/UK: No authorisation
Metiram	M3	Alternaria leaf spots	APVMA: nominated for review Canada: Proposed cancelling of foliar uses other than potato Codex: To be reviewed EU/UK: No authorisation

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Metiram + pyraclostrobin	11 + M3	Target spot (Early blight)	Metiram APVMA: nominated for review Canada: All foliar uses, other than potato, cancelled Codex: To be reviewed EU/UK: No authorisation
Penthiopyrad	7	Grey mould	
		Powdery mildew	
		Target spot (Early blight)	
Phosphorous acid	33	Phytophthora soil fungus (Dieback) (PER81408)	
Pydiflumetofen + difenoconazole	7 + 3	Cercospora leaf spot	Difenoconazole:
		Early blight	APVMA: nominated for review
		Powdery mildew	EU: Candidate for substitution USA: Under review
Triadimenol	3	Powdery mildew	APVMA: nominated for review Canada : No authorisation in place EU/UK: No authorisation in place USA: Registration cancelled
Zineb	M3	Target spot (Early blight)	APVMA: nominated for review
		Anthrachnose(PER14839)	Codex: To be reviewed
		Late (Irish) blight(PER14839)	EU/UK: No authorisation

Eggplant Agrichemical Regulatory Risk Assessment

Active Constituents	Chemical Group	Comments
WEEDS		
Clethodim (PER82459)	1	Codex: MRLs proposed for deletion
Diquat	22	APVMA: Currently under review EU/UK: No authorisation in place
Fluazifop-P (PER82556)	1	
Glyphosate	9	EU: Under review Ongoing issues internationally
Paraquat	22	APVMA: Currently under review Canada: Review initiated EU/UK: No authorisation in place Rotterdam Convention - nomination
Trifluralin (PER12823)	3	EU/UK: No authorisation in place
PLANT GROWTH REGULATORS		
Paclobutrazol		EU: Candidate for substitution

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