

Prune (Dried plum) 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Regulatory pressures on agrichemicals are increasing globally, with many being either restricted or withdrawn from use.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 stone fruit as well as current initiatives aimed at addressing identified pest management deficiencies.

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	Problem	Comment
	Group		
		INSECT AND OT	HER PESTS
Acequinocyl	20B	Two-spotted (Red spider) mite	
Acetamiprid + novaluron	4A + 15	Black peach aphid	<u>Acetamiprid</u>
		Fruit flies	APVMA: Under review
		Green peach aphid	Novaluron
		Lightbrown apple moth	EU: No authorisation in place
		Oriental fruit moth	
		San Jose scale	
Alpha-cypermethrin	3A	Apple weevil	EU: Not renewed, grace period expired December 2022
		Garden weevil	UK: Approval withdrawn
		Fruit flies (PER91059)	
Bifenazate	20D	Bryobia mite	Canada: Review initiated
		European red mite	EU: Use restricted to non-edible crops in permanent greenhouses.
		Two-spotted (Red spider) mite	
Bifenthrin	3A	Carpophilus beetle	Canada: Not authorised
		Dried fruit beetles	EU: Not authorised

Active Constituents	Chemical Group	Problem	Comment
Carbaryl	1A	European earwig	Canada: Reviewed, large number of uses deleted
		Fruit-tree borer	Codex: Review scheduled, support uncertain
		Green treehopper	EU: Authorisation not renewed
		Helicoverpa species	USA: Under review
		Lightbrown apple moth	
		Orange fruit borer	
		Oriental fruit moth	
		Redshouldered leaf beetle	
		Wingless grasshopper	
Chlorantraniliprole	28	Black cutworm	
		Lightbrown apple moth	
		Oriental fruit moth	
Chloropicrin + methyl bromide	8B + 8A	Stored product insect pests	Chloropicrin EU: No authorisation Methyl bromide EU: No authorisation
Chlorpyrifos	1B	European earwig	APVMA: Under review.
		Lightbrown apple moth	Codex: All MRLs revoked
		San Jose scale	Canada: Cancellation of all uses.
		Queensland fruit fly(Bait spray)	EU: No authorisation in place
		Locusts (PER11843)	USA: EPA decision to cancel use on food crops
Clofentezine	10A	Bryobia mite	EU: No authorisation
		European red mite	
		Two-spotted (Red spider) mite	
Clothianidin	4A	Fruit flies	APVMA: Under review
		Carpophilus beetle	Canada: Field uses cancelled or amended
			EU: Not authorised
			USA: Re-registration with new risk mitigation measures
Cydia pomonella granulosis virus	31	Oriental fruit moth	

Active Constituents	Chemical Group	Problem	Comment
Diazinon	1B	Cherry aphid Green peach aphid San Jose scale	APVMA: <u>Under review</u> EU: No authorisation in place Codex: Withdrawal of Codex MRLs recommended
Dimethoate	1B	Fruit flies(PER13859) (Post-harvest orchard clean-up treatment)	Codex: No MRLs. EU: Not authorised
Ethyl formate	8A	Stored dried fruit insect pests	EU: No authorisation in place
Etofenprox	3A	Fruit flies	EU: Candidate for substitution
Etoxazole	10B	Bryobia mite European red mite Two-spotted (Red spider) mite	EU: Uses on greenhouse ornamentals only & Candidate for substitution
Fipronil	2В	Queensland fruit fly	APVMA: Under review Codex: Re-evaluation underway EU: No authorisation in place USA: Under review
Hexythiazox	10A	European red mite Two-spotted (Red spider) mite	
Imidacloprid	4A	Black peach aphid Green peach aphid	APVMA: Under review Canada: Field uses cancelled or amended EU: No authorisation USA: Re-registration with new risk mitigation measures
Indoxacarb	22A	Apple weevil Fuller's rose weevil Garden weevil Helicoverpa species Lightbrown apple moth Oriental fruit moth Wingless grasshopper	Canada: No authorisation EU: Authorisation not renewed. Grace period expires 19/9/2022 UK: Proposed non-renewal

Active Constituents	Chemical Group	Problem	Comment
Lambda-cyhalothrin	3A	Fruit flies(PER12961 – SA Biosecurity) (Soil drench)	EU: Candidate for substitution
Malathion/maldison	1B	Black peach aphid	APVMA: Under review
		Cherry aphid	Codex: Re-evaluation scheduled for 2025/26
		European red mite	EU: Restricted use to permanent greenhouses
		Fruit flies	
		Green peach aphid	
		locust (PER11843)	
		Oriental fruit moth	
		Rutherglen bug	
		Wingless grasshopper	
Methomyl	1A	Green peach aphid	APVMA: nominated for review
		Helicoverpa species	Canada: Re-evaluation completed. Majority of uses removed
		Redshouldered leaf beetle	EU: No authorisations in place
		Thrips	USA: Under review
Methyl bromide	8A	Quarantine & Pre-shipment	EU: No authorisation
Milbemectin	6	Two-spotted (Red spider) mite	
Paraffinic oil/petroleum oil	UNM	European red mite	
		Bryobia mite	
		Frosted scale	
		Mites	
		Oystershell scale	
		Pear scale	
		San Jose scale	
		Scale insects	
		Spider mites (Red spider)	
		Two-spotted (Red spider) mite	
Phosphine (PH ₃)	24A	Storage pests	Codex: To be reviewed
Pirimicarb	1A	Black peach aphid	Codex: JMPR re-evaluation scheduled
		Cherry aphid	EU: Candidate for substitution
		Green peach aphid	

Active Constituents	Chemical Group	Problem	Comment
Propargite	12C	European red mite	APVMA: nominated for review
Propargite	120	Mites	EU: No authorisations
			Lo. No authorisations
	0.0	Two-spotted (Red spider) mite	
Pymetrozine	9B	Black peach aphid	Canada: Restricted use to glasshouses only
		Green peach aphid	Codex: No registrant support
Durathring	3A	Cabbaga white butterfly	EU: Not authorised Canada: Under review
Pyrethrins	3A	Cabbage white butterfly	Canada: Onder review
		Caterpillars	-
	i i	Fruit flies	
		Grapevine moth	
ļ		Green peach aphid	
		Helicoverpa species	
		Lightbrown apple moth	
	ļ	Plague thrips	
		Rutherglen bug	
Spinetoram	5	Caterpillars	
		Lightbrown apple moth	
		Oriental fruit moth	
		Pear and cherry slug	
		Western flower thrips	
		Fruit flies(PER12590)	
Spinosad	5	Lightbrown apple moth	
		Oriental fruit moth	
		Pear and cherry slug	
		Western flower thrips	

Active Constituents	Chemical	Problem	Comment
	Group		
Spirotetramat	23	Black peach aphid	
		Cherry aphid	
		Longtailed mealybug	
		San Jose scale	
		Tuber mealybug	
		Western flower thrips(PER84804)	
Sulfoxaflor	4C	Apple dimpling bug(Yellow mirid)	USA: Pollinator concerns
		Black peach aphid	EU: Use restricted to permanent glasshouses only
		Cherry aphid	
		Green peach aphid	
Sulfur	UN	Bryobia mite	
		Frosted scale	
		San Jose scale	
Sulfuryl fluoride	8C	All life stages of stored product pests	
Tau-fluvalinate	3A	Plague thrips	
Tebufenpyrad	21A	European red mite	EU: Candidate for substitution
		Two-spotted (Red spider) mite	
Tetraniliprole	28	Apple weevil	EU: Not authorised
		Dried fruit beetles	
		Fuller's rose weevil	
		Garden weevil	
		Mediterranean fruit fly	
		Oriental fruit moth	
Thiacloprid	4A	Green peach aphid	APVMA: Under review
		Oriental fruit moth	EU: No authorisation in place
		Mediterranean fruit fly(PER14562)	USA: No authorisation
Trichlorfon	1B	Queensland fruit fly	APVMA: nominated for review
		Rutherglen bug	Codex: No MRLs
		Fruit flies(PER14683)	EU: No authorisations
			USA: No MRLs

Active Constituents	Chemical Group	Problem	Comment
	ES		
Agrobacterium radiobacter	NC	Crown gall	
BLAD	BM01	Blossom blight	
		Brown rot	
Captan	M4	Brown rot	EU: Under review proposed restriction to use in permanent greenhouses only
		Blossom blight	USA: Under review
Chlorothalonil	M5	Blossom blight	APVMA: nominated for review
		Brown rot	Canada: Proposed cancellation of uses
		Rust	EU: No authorisation in place
		Shot hole	USA: Under review
Copper	M1	Bacterial canker/blast	EU: Candidate for substitution
		Bacterial spot	
		Blossom blight	
		Brown rot	
		Freckle or scab	
		Leaf curl	
		Phytophthora stem rot	
		Rust	
		Shot hole	
		Trunk and stem canker	
Cyproconazole +iodocarb	3 + 28	Silver leaf	Cyproconazole
			APVMA: nominated for review
			EU: No authorisation in place
			lodocarb
			EU: No authorisation in place
Cyprodinil	9	Blossom blight	Canada: Under review
		Brown rot	EU: Candidate for substitution

Active Constituents	Chemical Group	Problem	Comment
Dithianon	M9	Brown rot	EU: Use restricted to non-edible crops
		Freckle or scab (Apricot, nectarine & peach)	
		Leaf curl (Nectarines and & peaches)	
		Peach blight	
		Rust (Nectarine, peaches &plums)	
		Shot hole	
Fludioxonil (Po)	12	Brown rot	EU: Under review & candidate for substitution
		Grey mould	
		Transit rot (Rhizopus soft rot)	
Fluopyram	7 + 11	Blossom blight (Botrytis spp.)	<u>Trifloxystrobin</u>
+trifloxystrobin		Brown rot	Canada: Under review
		Shot hole	
Fosetyl-Al	33	Phytophthora trunk/Collar rot (PER85273)	
lodine	M	Bactericide	
		Fungi	
Iprodione	2	Blossom blight	Canada: Majority of food crop uses deleted
		Brown rot	Codex: Review scheduled
		Stem end rot(Po)	EU: No authorisation in place
		Transit rot (Rhizopus soft rot) (Po)	USA: Proposed deletion or restriction of uses
Mancozeb	M3	Bacterial canker/blast	APVMA: nominated for review
		Brown rot	Canada: Many uses cancelled
		Freckle or scab	Codex: To be reviewed 2024/25
		Rust	EU: Authorisation not renewed
		Shot hole	
		Blossom blight	

Active Constituents	Chemical Group	Problem	Comment
Mandestrobin (Plum)	11	Blossom blight	
		Brown rot	
Metiram	M3	Rust	APVMA: nominated for review
		Shot hole	Canada: All foliar uses, except potato, cancelled
			Codex: To be reviewed 2024/25
			EU: Under review
Penthiopyrad	7	Blossom blight	
		Brown rot	
		Freckle or scab	
Procymidone	2	Blossom blight	APVMA: Review in progress
			Codex: No MRLs
			EU: No authorisations
Propiconazole	3	Brown rot	APVMA: nominated for review
			EU: No authorisations
Sulfur	M2	Blossom blight	
		Brown rot	
		Freckle or scab	
		Leaf curl	
		Rust	
		Shot hole	
Thiram	M3	Brown rot	APVMA: nominated for review
		Freckle or scab	Canada: All foliar uses cancelled (2021)
		Shot hole	Codex: To be reviewed 2024/25
			EU: No authorisation in place

Active Constituents	Chemical	Problem	Comment
	Group		
Triforine	3	Brown rot	APVMA: nominated for review
			EU: No authorisation
Zineb	M3	Rust	APVMA: nominated for review
			Codex: To be reviewed 2024/25
			EU: No authorisation in place
Ziram	M3	Blossom blight	APVMA: nominated for review
		Brown rot	Canada: Cancelling of all uses
		Freckle or scab	Codex: To be reviewed 2024/25
		Leaf curl	EU: Candidate for substitution
		Shot hole	

Active Constituents	Chemical	Comment			
	Group WEEDS				
Amitrole	34	APVMA: nominated for review EU: No authorisation in place			
Carfentrazone-ethyl	14				
Dichlobenil	29	EU: No authorisation in place			
Diquat	22	APVMA: Currently under review EU: No authorisation in place			
Fluazifop-P	1				
Flumioxazin	14				
Glufosinate-ammonium	10	Canada: Review initiated EU: No authorisation in place			
Glyphosate	9	Ongoing issues internationally EU: Under review			
Haloxyfop-P	1	EU: No authorisation in place			
Napropamide	0				
Norflurazon	12	EU: No authorisation in place			
Oryzalin	3	EU: No authorisation in place			
	14	EU: Candidate for substitution			
Oxyfluorfen		USA: Interim review decision Label amendments proposed			
Paraquat	22	APVMA: Currently under review			
		EU: No authorisation in place			
		Rotterdam Convention: nomination			
Pendimethalin	3	EU: Candidate for substitution			
Trifluralin	3	EU: No authorisation in place			

Active Constituents	Chemical	Comment
	Group	
PLANT GROWTH REGULATORS		
1-methylcyclopropene		
Aminoethoxyvinylglycine (AVG)		EU: No authorisation
Ammonium thiosulfate		EU: No authorisation
Cyanamide		EU: No authorisation
Gibberellic acid		
Paclobutrazol		EU: Candidate for substitution

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Communications Manager

Hort Innovation

Level 7, 141 Walker Street

North Sydney NSW 2060

Australia

Email: communications@horticulture.com.au

Phone: 02 8295 2300