



IPDM Calendar for Cherries 2014



* - Commence monitoring from bud burst (see over)	100% LEAF FALL	DORMANCY	BUDSWELL	BUD BURST	FLOWERING	SHUCK FALL	SHOOT AND FRUIT DEVELOPMENT	HARVEST	POST HARVEST			
MONITORING			Hang fruit fly traps in orchard and check frequently (fortnightly for export)				And - Check fruit for stings					QFF
CULTURAL	Remove alternative fruit sources – clean up rotting fruit					Remove rotting and fallen fruit, keep orchard floor clear						
BIOLOGICAL			Low pressure ; use bait sprays at 7-10 day intervals from first sighting. High pressure ; use bait sprays at 7-10 day intervals all season									
MONITORING			Hang fruit fly traps in orchard and check frequently (fortnightly for export)				And - Check fruit for stings					LBMF
CULTURAL	Remove alternative fruit sources – clean up rotting fruit					Remove rotting and fallen fruit, keep orchard floor clear						
BIOLOGICAL			Low pressure ; use bait sprays at 7-10 day intervals from first sighting. High pressure ; use bait sprays at 7-10 day intervals all season									
MONITORING			Hang traps in orchard and check frequently (weekly or fortnightly – depending on export destination)									CM
CULTURAL	Keep weeds down, and remove pruning waste			Keep weeds down to reduce the number of overwintering sites								
BIOLOGICAL		Place pheromone traps in orchard		Encourage parasitic & predatory insects, consider <i>Trichogramma</i> wasps			Match control to egg hatching, use date of first trap catch as a guide, selective insecticides available					
MONITORING			Hang traps in orchard and check frequently (weekly or fortnightly – depending on export destination)									OFM
CULTURAL	Keep weeds down, and remove pruning waste			Keep weeds down to reduce the number of overwintering sites								
BIOLOGICAL		Place pheromone traps in orchard		Most insecticides targeted at other moths will control other moth pests								
MONITORING			Check growing tips regularly, especially early in the season									APH
CULTURAL			Minimise excessive vegetative growth and physically remove colonies if small scale infestation occurs									
BIOLOGICAL		Encourage parasitic and predatory insects with nectar-producing plants within orchard, headlands and windbreaks										
MONITORING			Check soil for pupae			Check trees for beetles, consider using banded cardboard traps						WEE
CULTURAL	Keep weeds and plant debris to a minimum, consider soil disruption if pupae spotted			Remove mulch from under trees, control weeds and consider removing low branches								
BIOLOGICAL	Consider using poultry to control weevils under trees (small scale only)						Consider dusk applications of insecticide (trunk sprays) if heavy infestations occur					
MONITORING			Check trees regularly for mealybug crawlers, check undersides of leaves, and stem bowls									MEB
CULTURAL	Keep weeds and plant debris to a minimum			Minimise movement of leaf material								
BIOLOGICAL		Encourage parasitic and predatory insects with nectar-producing plants within orchard, headlands and windbreaks										
MONITORING			Check trees regularly for crawlers, especially early in the season									SCA
CULTURAL	Keep weeds and plant debris to a minimum			Physical removal possible if small scale infestation occurs		Minimise movement of leaf material						
BIOLOGICAL		Apply winter oil	Most insecticides targeted at other pests may also suppress or control scale									
MONITORING			Check growing tips regularly, especially early in the season. Traps can be used.									THR
CULTURAL	Keep weeds down		Keep weeds down to reduce the number of overwintering sites									
BIOLOGICAL		Encourage parasitic and predatory insects with nectar-producing plants within orchard, headlands and windbreaks				Apply 3 consecutive sprays if thrips present, keep monitoring and use insecticide with alternative mode of action if thrips return						
MONITORING			Check soil for pupae			Check buds and growing tips early in the season for bud worm, continue checking trees throughout the season						BUD
CULTURAL	Keep weeds and plant debris to a minimum, consider soil disruption if pupae spotted			Encourage parasitic and predatory insects with nectar-producing plants within orchard, headlands and windbreaks								
BIOLOGICAL		Most insecticides targeted at leaf rollers will suppress other moth pests										
MONITORING			Check trees for beetles (funnel traps could be used)									BEET
CULTURAL	Remove alternative fruit sources – clean up rotting fruit			Remove rotting and fallen fruit, keep orchard floor clear								
BIOLOGICAL		Insecticide use if not necessary unless populations are very high										
MONITORING			Check soil for pupae			Check trees for slug damage regularly, try and catch the first emergence early in the season						CSL
CULTURAL	Keep weeds and plant debris to a minimum, consider soil disruption if pupae spotted			Encourage parasitic and predatory insects with nectar-producing plants within orchard, headlands and windbreaks								
BIOLOGICAL		Apply winter oil	Most insecticides targeted at other pests will suppress or control cherry slug.									
MONITORING			Check trees or traps for earwigs, suggested threshold is 5 earwigs per tree/trap			Monitor for fruit damage if population high						EAR
CULTURAL		Remove mulch from under trees, control weeds and consider removing low branches			Consider using poultry to control weevils under trees (small scale only)							
BIOLOGICAL		Apply ground baits before earwigs move up into trees.	Apply ground baits for second generation if necessary									
MONITORING			Check trees for cankers to remove			Monitor trees (requirement for export to China)						BCK
CULTURAL	Site & variety selection important, use clean graft wood			Prune out infected wood								
BIOLOGICAL	Apply copper at early and late dormancy		Apply copper if infection severe		Apply copper at 10% & 80% leaf fall							
MONITORING			Assess risk by estimating mummified fruit numbers			Monitor trees (requirement for export to China)						BRW
CULTURAL	Remove mummified fruit and infected twigs			Good insect control will limit spread								
BIOLOGICAL		Apply systemic fungicides		Apply protectant and systemic fungicides if required								
MONITORING			Monitor trees (requirement for export to China)									TWB
CULTURAL	Site & variety selection important, use clean graft wood			Control of bacterial canker and brown rot should also suppress other diseases								
BIOLOGICAL												



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Fruit fly	Mediterranean Fruit Fly	<i>Ceratitis capitata</i>
	Queensland Fruit Fly	<i>Bactrocera tryoni</i>
	Other Fruit flies	<i>Bactrocera sp.</i>
Moth	Codling Moth	<i>Cydia pomonella</i>
	Light Brown Apple Moth	<i>Epiphyas postvittana</i>
	Tortricid Moth (LLBAM)	<i>Epiphyas xyloides</i>
	Oriental Fruit Moth	<i>Cydia molesta</i>
Aphid	Black Cherry Aphid	<i>Myzus cerasi</i>
	Black Peach Aphid	<i>Brachycaudus persicae</i>
Weevil	Fuller's Rose Beetle/Weevil	<i>Asynonychus cervinus</i>
	Garden Weevil (Vine calandra)	<i>Phlyctinus callosus</i>
Mealybug	Citropilus mealybug	<i>Pseudococcus calceolariae</i>
	Long-tailed Mealybug	<i>Pseudococcus longispinus</i>
Scale	European Brown Scale	<i>Parthenolecanium corni</i>
	Oleander scale	<i>Aspidiotus nerii</i>
	Oystershell Scale	<i>Lepidosaphes ulmi</i>
	San Jose Scale	<i>Quadraspidiotus perniciosus</i>
Thrips	Plague Thrips	<i>Thrips imagines</i>
	Western Flower Thrips	<i>Frankliniella occidentalis</i>
Worm	Native Bud worm	<i>Helicoverpa punctigera</i>
Beetle	Plague Soldier Beetle	<i>Chauliognathus lugubris</i>

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	Pests	how often?	where to look?	how many traps/trees?	threshold	Action
Fruit Fly	Mediterranean Fruit Fly Queensland Fruit Fly Other Fruit flies	fortnightly *	traps#	refer to notes	refer to notes	talk to local agency consider end point treatment options
Leaf Roller	Codling Moth Light Brown Apple Moth Tortricid Moth (LLBAM) Oriental Fruit Moth	* fortnightly fortnightly fortnightly	traps and trees	refer to notes	7 moths per trap (average)	talk to local agency consider end point treatment options
Aphids	Black Cherry Aphid Black Peach Aphid	fortnightly *	buds, new growth, leaf tips	10 trees per block	2 colonies per tree	refer to IPM calendar and spray program guide
Weevils	Fuller's Rose Weevil Garden Weevil	fortnightly	trees	10 trees per block	50+ weevils per tree	refer to IPM calendar and spray program guide
Mealybug	Citropilus mealybug Long-tailed Mealybug	fortnightly	branch junctions, leaves, fruit stem bowls	10 trees per block	No threshold set **	refer to IPM calendar and spray program guide
Scale	European Brown Scale Oleander scale Oystershell Scale San Jose Scale	fortnightly	bark, brances, fruit and leaf stems	10 trees per block	No threshold set **	refer to IPM calendar and spray program guide
Thrips	Plague Thrips Western Flower Thrips	fortnightly *	buds, new growth, leaf tips	10 trees per block	Presence	refer to IPM calendar and spray program guide
Worms	Native Bud worm	fortnightly	buds, new growth,	10 trees per block	No threshold set	refer to IPM calendar
Beetles	Plague Soldier Beetle Carpophilus Beetle	fortnightly	trees	10 trees per block	No threshold set	refer to IPM calendar alert packing shed
Cherry Slug		fortnightly	leaves	10 trees per block	No threshold set	refer to IPM calendar
Earwig		fortnightly	trees	10 trees per block	No threshold set	refer to IPM calendar
Pest Mites		fortnightly	trees	10 trees per block	No threshold set	refer to IPM calendar

Diseases	how often?	where to look?	how many traps/trees?	threshold	Action
Bacterial canker	fortnightly*	trees	10 trees per block	No threshold set	refer to IPM calendar
Brown rot [@]		fruit	10 fruit clusters per block	**	
Twig blight		trees	10 trees per block		
Shot hole		leaves	10 trees per block		

Monitoring to commence at bud burst and results need to be recorded on monitoring sheets

*Monitoring fortnightly meets most export protocols, check specific workplans to be sure

*Monitoring for codling moth is undertaken by DPIPWE in Tasmania for export to Japan and Korea – this is done weekly to meet those protocols

* It is recommended that monitoring occur more frequently for thrips and aphids from bud swell to petal fall

#Traps for fruit fly can be specific for each type, or they can be non-specific. Talk to your supplier and check the workplan for requirements

**There is no threshold set for mealybug, scale, or any of the diseases for cherries. Keep records and notes and you may be able to set your own threshold for damage.

@ If rot is visually detected follow up with diagnostic testing to discern if it is *Monolinia sp.* or *Botrytis sp.* The type of rot will impact on treatment options available.