

## Welcome to the 2024/25 dried grape spray diary

This spray diary is a mandatory component of the dried grape processors' quality assurance programs. A rigorous quality assurance program is now a basic requirement of food marketing worldwide. It is the key component to ensuring the dried grape industry meets Australia's and the rest of the world's food safety requirements.

The spray diary must be maintained accurately. Processors will require the spray diary or equivalent to be submitted by harvest or 10 February 2025 (whichever comes first). Ensure this obligation is met by keeping the diary up to date throughout the growing season.

The recommendations in the tables have been developed to satisfy the lowest maximum residue limits (MRLs) for any of Australia's major dried grape markets after considering available data on the persistence of agrichemicals in dried grapes after the drying process. Markets with strict MRLs usually represent the highest value markets for dried vine fruit.

A processor may be prepared to relax these restrictions if the fruit will be sold exclusively into a market that has an MRL greater than the likely expected residue of an agrichemical or if the market otherwise permits residues of that particular agrichemical. In this case, the label withholding period is the minimum delay that should be observed between applying a chemical to the grapes and harvest. Provided a chemical is registered for use in vineyards, a chemical not listed in the dried grape spray diary can be used if the processor has provided prior written approval and the chemical is used according to label specifications.

This spray diary will be provided to GrapeWeb, for uploading electronically, with the latest requirements and changes.

### INSTRUCTIONS

1. Complete the property map and record each patch of a variety as a separate section (A, B, *etc.*), ensuring changes to plantings from previous years are shown.
2. Complete the Chemical Spray Record sheet at the time each spray is applied.
3. The original white copies of the map and chemical spray records must be forwarded to your processor by 10 February 2025. Failure to do so will jeopardise your approved supplier status and may lead to additional grading processes to ensure fruit quality. Any additional costs involved will be borne by the supplier. Retain the yellow copy for your records.

### ASSISTANCE

If you have any questions regarding the use of the spray diary, please contact your processor or DFA:

Sunbeam Foods – 03 5051 4400

Australian Premium Dried Fruits – 03 5025 6210

Dried Fruits Australia – 03 5023 5174

**Disclaimer:** Dried Fruits Australia has used all reasonable care in compiling this spray diary but does not warrant the accuracy or completeness of the information in this publication. Please make contact with your processor prior to doing any spraying to ensure accuracy. Anything outside of this spray diary, please contact your processor for risk assessment prior to your application, on a case-by-case basis.

## MAXIMUM RESIDUE LIMITS

A maximum residue limit (MRL) is the maximum amount of chemical residue acceptable in food products. MRLs are established for all crops and vary between products and countries. MRLs are expressed as the quantity of chemical residue (mg) per quantity of product (kg). Australian dried grape producers must adopt management practices that ensure residues fall below domestic and export markets' MRLs.

There are several steps producers can take to avoid unwanted and unnecessary chemical residues at harvest:

- strategy - focus on early season management to significantly reduce disease or pests;
- spray timing - ensure sprays are timed to match peaks in pest or disease pressure to reduce the on-going pest and disease load during the season.
  - *Poorly timed sprays can result in inadequate control, requiring additional sprays remedy problems later in the season.*
  - *Late season sprays may not be effective and increase the risk of excessive residues at harvest.*
- spray efficiency - optimise effectiveness of sprays applied by using the most appropriate nozzles, fan speed and filters;
  - *Adjust volume applied to canopy size and use water sensitive paper in canopy to test coverage.*
- encourage beneficial insects - wasps, ladybirds, lacewings and predatory mites assist with the control of pests, and are prevalent in some vineyards;
  - *Careful choice of insecticides can protect biological control agents throughout the season and prevent build-up of pest populations;*
- seek advice – use of some agrichemicals within six weeks of harvest should be avoided.
  - *Your processing company's field officer should be able to advise alternatives.*

## FUNGICIDE RESISTANCE

Resistance to many commonly used fungicides is a serious problem worldwide.

Fungicide resistance is the ability of a plant disease causing organism to survive repeated exposure to a fungicide. Resistance may develop after the frequent use of one fungicide or fungicides from the same activity group. Fungicides in the same activity group have the same mode of action.

It is important any resistance management strategy prevents the build-up of resistant individuals in a disease organism population and minimises fungicide-resistance selection pressure by not overusing fungicides from the same activity group.

Croplife Australia has set out two management initiatives that ensure the best control and least risk of developing resistance:

1. all fungicides are classified by activity group, which appears as an alphanumeric code (*i.e.* a number or letter and number combination) on the fungicide product label, and
2. strategies for the use of fungicides in crops where resistance by a disease-causing organism is already evident or considered a risk.

These strategies were developed by the Croplife Australia's Fungicide Resistance Management Review Group and industry researchers. They are a guide only and do not endorse specific products, groups of products or cultural methods in terms of their performance. Always follow the product label for specific use instructions.

While all effort has been taken with the information supplied in this document, no responsibility, actual or implied, is taken for the day-to-day accuracy of product or active constituent specific information. Readers should check the Australian Pesticides and Veterinary Medicines Authority (APVMA) product database for contemporary information on products and actives. The database can be sourced through [www.apvma.gov.au](http://www.apvma.gov.au).

The information in these strategies is provided in good faith and without any liability for loss or damage suffered as a result of its application and use. Advice given in these strategies is valid as at 26 June 2024. All previous versions of these strategies are now invalid.

## DOWNY MILDEW RESISTANCE MANAGEMENT STRATEGIES

*Table 1 Activity group alphanumeric codes and modes of action of chemicals suitable to control Downy mildew in Australian dried vine fruit production systems*

Activity group	Mode of action
4	phenylamides
11	quinone outside inhibitors (QoI)
11 + 3	QoI + demethylation inhibitors (DMI)
21	quinone inside inhibitors (Qil)
40	carboxylic acid amides
45	quinone outside inhibitor, stigmatellin binding type (QoSI)
45+40	QoSI + CAA
49	oxysterol binding protein homologue inhibitors (OSBPI)
M1	multi-site activity inorganic (electrophiles) - copper
M3	Multi-site activity and dithiocarbamate and relatives

- Start preventative disease control sprays using non-Group 4 protectant fungicides, typically when shoots are 10–20cm long. Continue spraying at intervals of 7–21 days depending on disease pressure, label directions and rate of shoot growth.
- Group 4 fungicides should be applied as soon as possible after an infection period and before the first sign of oil spots. Limit use of Group 4 fungicides to disease-favouring conditions and always apply in mixtures.
- Group 49 fungicides should be applied before infection and only in mixtures with effective fungicides from a different cross resistance group applied at an effective rate. Mixture fungicide should provide effective control of downy mildew at rate and interval selected. Maximum of two Group 49 applications per season and only apply a Group 49 fungicide one in every three sprays. A Group 49 fungicide spray needs to be followed by at least two applications of fungicides from different groups before another Group 49 application.
- Apply a maximum of two consecutive applications of Group 4, 21 or 40 fungicides.
- Do not apply Group 11 (including Group 11+3) consecutively if applied alone.
- Seasonal maximum of two Group 11 (including mixtures), Group 45+40 and Group 49.
- Group 40-containing sprays only to amount to half the number of seasonal downy mildew sprays applied, and a Group 40 spray should not be the last spray of the season.
- Maximum of two Group 21-containing sprays per season and a maximum of two consecutive sprays.
- Mixtures are co-formulations or tank mixes with label rates of alternative mode of action.

Table 2 Seasonal fungicide spray mix frequency as a function of activity group code

	Activity group				
	4	11 11+3	21+M1	40 45+40 40+M3	49
Maximum consecutive applications	2	none	2	2	none
Maximum solo sprays	none	2	3	2 (50%)	none
Maximum sprays per season	4-mix	2	3	4-mix (50%)	2-mix
Areas of higher agronomic risk	mix	mix	n/a	mix	mix

## BOTRYTIS BUNCH ROT (GREY MOULD) RESISTANCE MANAGEMENT STRATEGIES

Table 3 Activity group alphanumeric codes and modes of action of chemicals suitable to control Botrytis in Australian dried vine fruit production systems

Activity group	Mode of action
2	dicarboximides
7	succinate dehydrogenase inhibitors (SDHI)
7+3	SDHI + demethylation inhibitors (DMI)
7+12	SDHI + phenylpyrroles (PP)
9	anilinopyrimidine (AP)
9+12	AP + PP
11	quinone outside inhibitor (QoI)
11+3	QoI + DMI
17	keto reductase inhibitors (KRI)
19	chitin synthase inhibitor
M	multi-site inorganic (electrophiles)
BM	multi-site plant and microbial extracts

- Always use an integrated disease management (IDM) approach to *Botrytis* mould management. Manipulate bunch zone microclimate to reduce humidity and enable rapid drying of wet bunches. Always aim to reduce spore load, flower and fruit infection and limit regrowth of latent infections and disease spread by timely fungicide application. Use fungicides registered for *Botrytis* control at label rates from as many different mode of action groups as possible when needed
- Apply all these fungicides as protectants before the first sign of disease
- Consecutive applications include from the end of one season to the start of the next
- Varying the number of fungicides applied targeting *Botrytis* changes the relative resistance risk to any one fungicide group. When three or fewer sprays are applied, it is recommended that three different groups of fungicides are used (see table below). When four sprays are applied, try to use three or four different groups of fungicide
- If a Group 11 or 7 fungicide is used solo, it should only be used in strict alternation with fungicides from a different mode of action group
- Do not apply more than two consecutive sprays from the same fungicide group for any Groups 2, 7, 9 (including combinations with Group 12), 11+3, 17 or 19 fungicide(s) including from the end of one season to the start of the following season

- If two consecutive applications of Group 11+3 fungicides are used, they must be followed by at least the same number of applications of fungicide(s) from a different group(s) before a Group 11 (including combinations with Group 3) fungicide is used again, either in the current or following season
- If resistance to a fungicide group has been detected within a region, only use that fungicide group in mixtures or in strict alternation with fungicides from a different cross-resistance group. A fungicide group that has been applied as the final application of the season should not be the first fungicide in the following season
- There is no specific resistance management strategy developed for low-risk fungicides, including those in Group M and BM. These products should be included in a management strategy based on label recommendations

*Table 4 Seasonal use of spray groups as a function of the number of Botrytis sprays applied in a season*

Seasonal sprays Botrytis applied	Activity group						
	2	7 7+3 7+12	9 9+12	11 11+3	12 7+12 9+2	17	19
	<i>Maximum times any fungicide in a group can be used in a season</i>						
1	1	1	1	1	1	1	1
2	1	1	1	1	2	1	1
3	1	1	1	1	2	1	1
4	2	1	2	2	2	2	2
5+	2	2	2	2	2	2	3

## POWDERY MILDEW RESISTANCE MANAGEMENT STRATEGIES

*Table 5 Activity group alphanumeric codes and modes of action of chemicals suitable to control powdery mildew in Australian dried vine fruit production systems*

Activity group	Mode of action
3	demethylation inhibitors (DMI)
5	amines (morpholines)
7	succinate dehydrogenase inhibitors (SDHI)
7+3	SDHI + DMI
7+12	SDHI + phenylpyrroles (PP)
11	quinone outside inhibitors (QoI)
11+3	QoI + DMI
13	aza-naphthalenes
13+3	aza-naphthalenes + DMI
19	chitin synthase inhibitor
21	quinone inside inhibitors (Qil)
50	actin disruptors (aryl-phenyl-ketone) fungicides
U6	phenyl-acetamide

- Apply fungicides preventatively
- If using medium to high-risk fungicides (Groups 7 and 11) consecutively, apply in a mix with a registered fungicide with a different mode of action and for which resistance is unknown
- No more than two consecutive sprays of Groups 3, 5, 13, 19, 21 50 or U6 products

- No more than three sprays of products containing Group 21 fungicides per season, or a maximum of a third of total applications (whichever is lower); alternate fungicides between successive seasons
- Consecutive applications include those applied from the end of one season to the start of the next
- Formulations may contain chemicals from multiple mode-of-action groups; restrictions on consecutive applications of chemicals from the same mode-of-action group also apply to multiple activity group products

*Table 6 Seasonal use of spray groups as a function of the number of powdery mildew sprays applied in a season*

Seasonal powdery mildew sprays applied	Activity group								
	3	5	7 7+3 7+12	11 11+3	13 13+3	19	21	50	U6
	Maximum times any fungicide in a group can be used in a season								
1	1	1	1	1	1	1	1	1	1
2	2	1	1	1	2	2	1	1	1
3	2	2	1	2	2	2	1	1	1
4	2	2	1	2	2	2	1	1	1
5	2	2	1	2	2	2	1	1	1
6	3	3	2	2	3	3	2	3	2
7	3	3	2	2	3	3	2	3	2
8	3	3	2	2	3	3	2	3	2
9+	3	3	3	2	3	3	3	3	2

## CHANGES TO CHEMICALS REGISTERED FOR DRIED VINE FRUIT PRODUCTION

This list has been developed with the input of dried fruit processors to meet export markets' MRL requirements. Do not use unlisted chemicals without first consulting your processors.

Chemicals listed in bold have an industry restriction on use so overseas MRLs are not exceeded. Please adhere to the industry recommended restriction rather than the label withholding period.

Some products that appeared in the previous seasons' spray diary have been deleted due to loss of registration, pending loss of registration, or lack of MRLs in export markets.

**Chemicals (and their targets) deleted from the diary over recent seasons include:**

- captan and iprodione - *Botrytis*
- boscalid – *Botrytis*
- chlorpyrifos and dimethoate – *Insecticide*
- mancozeb, thiram and chlorothalonil – *Black spot*
- mancozeb, propineb, zineb, oxadixyl – *Downy mildew*
- cyanamide and chlormequat – *Plant growth regulators*

Note that boscalid, a chemical used for *Botrytis* control, has been deleted due to its persistence in grapes.

By their usage group, chemicals recently added and allowed for use (and their targets) include:

*fungicides*

- fluopyram and tebuconazole - *Botrytis* and powdery mildew
- BLAD – *Botrytis*
- copper ammonium acetate, and metalaxyl – downy mildew
- potassium bicarbonate+silicate – downy and powdery mildews

*insecticides*

- spinosad and tebufenozide – LBAM and grapevine moth
- emamectin – grapevine moth and LBAM
- acetamiprid+pyriproxyfen – grapevine scale and mealybug
- iron phosphate anhydrous and iron powder - snails

*herbicides*

- glufosinate-ammonium+carfentrazone – non-specific post-emergent
- glyphosate acid - non-specific post-emergent
- glyphosate-potassium+mea - non-specific post-emergent
- nonanoic acid – contact knockdown

Active constituent(s)	Activity group	Some registered products	Restriction on use
<i>Black spot</i>			
metiram	M3	Fruitcote, Polyram DF	Not after E-L 25 (80% capfall)
ziram	M3	Ziram DG, Ziram WG	No more than 3 Group M3 fungicides per season
copper oxychloride	M1	Oxydul DF	Not within 49 days of harvest
dithianon	M9	Delan 700 WG, Dialon 700WG, Dinon 700 WG, Diathianon 700 WG, Dragon 700 WG, Dungeon 700 WG, Wrath 700WG	Not within 30 days of harvest
<i>Botrytis bunch rot (review resistance strategies on page 4)</i>			
fluopyram + tebuconazole	7+3	Luna Experience	Not after E-L 17 (12 leaves separated, single flowers separated)
fenhexamid	17	Altivo 500SC, Fenhexamid 500 SC, Jigsaw 850WG, Teldor 500 SC	Not after E-L 25 (80% capfall)
pyrimethanil	9	Predict 600 SC, Pyper 600 SC, Pyrimethanil 600 SC, Scala 600 SC	
tebuconazole + azoxystrobin	3+11	Aztec, Custodia	
azoxystrobin	11	Accolade 250 SC, Affix 250 SC, Agristar 250SC, Amistar 250 SC, A-star 250 SC, Avior (250 SC, 800 WG), Azoxy 250, AzoxyGuard 250 SC, Azoxys 250 SC, Azoxystrobin (250, 250 SC, 500 WG), Castle 250 SC, Connect 800 WG, Mirador (250 SC, 625), Spartacus (250, 250 SC, 500WG), Stellar	
			Not within 14 days of harvest
potassium salts of fatty acids	U1	Ecoprotector	
BLAD	BM01	ProBlad	Not within 7 days of harvest
hydrogen peroxide + peroxyacetic acid	M+M	(Suppression only) Peracetic Acid, PeraCrop Max, Peratec, Peratec PLUS, Peroxy Treat	
<i>Aureobasicium pullulans</i>	BM02	Botector	Use till harvest
<i>Bacillus amyloliquefaciens</i>	BM02	Serenade Opti, Serifel	



<i>Downy mildew (review resistance strategies on page 3)</i>			
ametoctradin + dimethomorph	45 + 40	Zampro	Not after E-L 25 (80% capfall)
dimethomorph	40	Acrobat SC, Downright, Meta Morph 500SC, Sphinx	No more than 3 Group M3 sprays per season
metiram	M3	Fruitcote, Polyram DF	
mandipropamid	40	Revus	Not after E-L 26 (100% capfall)
azoxystrobin	11	Accolade 250 SC, Affix 250SC, Agristar 250SC, Amistar 250SC, A-star 250SC, Avior (250 SC, 800 WG), Azoxy 250, AzoxyGuard 250 SC, Azoxys 250 SC, Azoxystrobin (250, 250 SC, 500 WG), Castle 250 SC, Connect 800 WG, Mirador (250 SC, 625), Spartacus (250, 250 SC, 500WG), Stellar	Not after E-L 29 (peppercorn size berries; diameter < 4 mm)
tebuconazole + azoxystrobin	3 + 11	Aztec, Custodia (Forte)	
amisulbrom	21	Amishield	Not after E-L 31 (pea-size berries; diameter < 7 mm)
amisulbrom + tribasic copper sulphate	21 + M1	Amicus Blue WG	
trifloxystrobin	11	(suppression only) Flint 500 WG, Invictus 500 WG	
pyraclostrobin	11	Cabretta 250EC, Cabrio, Pavo 250 EC, Pyraclostrobin 250 EC, Roadster 500 EC, Symbio 250 EC, Vipyr 250 EC	Neither later than E-L 31 (as above) nor within 63 days of harvest
copper ammonium acetate	M1	Cop-IT	Not within 30 days of harvest
copper ammonium complex	M1	Copperguard	
copper cuprous oxide	M1	Copp 750 WG, Nordox 750 WG, Red Copper WG	
copper hydroxide	M1	Blue Shield DF, Champ (DP, Dry Prill WG), Copper Hydroxide (350 WG, 400 WG, 500), Flo-Bordo, Flowcop 500WG, Hydrocop WG, Kocide (Blue Xtra, Opti), Vitra 400 WG	
copper oxychloride	M1	Copper Oxychloride (WP), Coppox (WG, WP), Cupro 375WG, EcoCopper 375WG,	

		Isacop 500WP, Neoram 375 WG, Oxydul DF	
copper sulphate tribasic	M1	Bordeaux WG, Tri-Base Blue, Tribasic (Copper Flowable, Flowable, Liquid)	
dithianon	M9	Delan 700 WG, Dialon 700WG, Dinon 700 WG, Dithianon 700 WG, Dragon 700 WG, Dungeon 700 WG, Wrath 700WG	
metalaxyl - M	4	Axiom Flexi	
metalaxyl - M + copper hydroxide	4 + M1	Ridomil Gold Plus	
metalaxyl + copper oxychloride	4 + M1	Axiom Plus, Copper Plus, Metalaxyl + Copper Oxychloride WP, Zeemil Plus	
sulphur + copper oxychloride	M2 + M1	Mildex WG	
copper oxychloride + copper hydroxide	M1 + M1	Airone WG	
sulphate tribasic	M1	Bordeaux WG, Cuprofix Disperss, Tri-Base Blue, Tribasic (Copper Flowable, Flowable, Liquid)	
hydrogen peroxide + peroxyacetic acid	M + M	(suppression only) PeraCrop Max, Peratec PLUS	Not within 7 days of harvest
potassium bicarbonate + silicate	M2	(suppression only) EcoCarb Plus	
phosphorous acid	P07 (33)	Agri-Fos 600, CropDoc 600, Dominator 600, Fungacid 600 Fungi-Fos 400, Grow-Phos 600 Phos Phyt 400, Phospot 400, Phospot 600, Sprayphos 400, Sprayphos 600 Sprayphos 620, Throw Down	Neither within 5 days of harvest nor more than 2 sprays per season
Eutypa dieback			
cyproconazole + iodocarb	3 + 28	Garrison Rapid Pruning Wound Dressing	Dormancy application
tebuconazole	3	Greenseal, Sprayseal	
Trichoderma harzianum	unspecified	Vinevax Bio-Dowell, Vinevax Bio-Implant, Vinevax Wound Dressing	
Phomopsis cane and leaf spot			
metiram	M3	Fruticote, Polyram DF	Not after E-L 25 (80% capfall)  No more than 3 Group M3

			sprays per season
dithianon	M9	Delan 700 WG, Dialon 700WG, Dinon 700 WG, Dithianon 700 WG, Dragon 700 WG, Dungeon 700 WG, Wrath 700WG	Not within 30 days of harvest
<i>Powdery mildew (review resistance strategies on page 5)</i>			
fluopyram + tebuconazole	7 + 3	Luna Experience	Not after E-L 17 (12 leaves separated, single flowers separated)
fenpropidin + difenconazole	5 + 3	Seeker Duo	Not after E-L 18 (14 leaves separated, cap colour fading)
pydiflumetofen	7	Miravis	Not after E-L 19 (16 leaves separated, caps starting to loosen)
metrafenone	U8	Vivando	Not after E-L 25 (80% capfall)
spiroxamine	5	Prosper 500 EC, Spire 500 EC	
azoxystrobin	11	Accolade 250 SC, Affix 250SC, Agristar 250SC, Amistar 250SC, A-star 250 SC, Avior (250SC, 800 WG), Azoxy 250, AzoxyGuard 250 SC, Azoxys 250 SC, Azoxystrobin (250, 250 SC, 500 WG), Castle 250 SC, Connect 800 WG, Mirador (250 SC, 625), Spartacus (250, 250 SC, 500WG), Stellar	Not after E-L 29 (peppercorn size berries; diameter < 4 mm)
difenoconazole	3	Digger EW	
tebuconazole	3	Laguna Xtreme 800WG, Orius 430 SC, Tebucon 430 SC, Tebuconazole (430SC, 750 WDG), Tebugran 750 WG	
tebuconazole + azoxystrobin	3 + 11	Aztec, Custodia (Forte)	
cyflufenamid	U6	Flute 50 EW	Not after E-L 31 (pea-size berries; diameter < 7 mm)
mefentrifluconazole	3	Belanty	
paraffinic oil	n/a	BioPest, CropCover, isoCLEAR HPO	
petroleum oil	n/a	JMS Stylet	
pyriofenone	50	Kusabi 300 SC	

trifloxystrobin	11	Flint 500 WG, Invictus 500 WG	
pyraclostrobin	11	Cabretta 250EC, Cabrio, Pavo 250 EC, Pyraclostrobin 250 EC, Roadster 500 EC, Symbio 250 EC, Vipyr 250 EC	Neither after E-L 31 (pea-size berries) nor within 63 days of harvest
penconazole	3	Azotic, Delos, Pearl, Ruby 100EC, Topas 100 EC	Neither after E-L 31 (pea-size berries) nor within 60 days of harvest
tetraconazole	3	Domark 40ME	
quinoxyfen	13	Legend, Quinfen 250 SC, Vitae	Neither after E-L 34 (early veraison) nor within 42 days of harvest
copper ammonium acetate	M1	Cop-IT	Not within 30 days of harvest
copper ammonium complex	M1	Copperguard	
myclobutanil	3	Myclonil WG, Mycloss Xtra, Stamina	
proquinazid	13	Talendo	
sulphur, present as elemental or crystalline sulphur	M2	Cosamil, EcoSulph 800WG, InnoSulph 800 WG, Kumulus DF, Microsul WG Elite, Microthiol Disperss, Nimbus WG, Sulfur (800 WG), Sulphur (800 WG, WG), Thiovit Jet, Top Wettable Sulphur, Wettable Sulphur, Yellowstone 800WG, Zulfa 800WG	
sulphur + copper oxychloride	M2 + M1	Mildex WG	Not within 7 days of harvest
hydrogen peroxide + peroxyacetic acid	M + M	Peratec PLUS (suppression only)	
potassium bicarbonate	M2	Ecocarb	
potassium bicarbonate + silicate	M2	EcoCarb Plus	
Australian plague locust			
Metarhizium anisopliae var. acridum	n/a	Green Guard SC Premium	Not within 7 days of harvest
Garden weevil			
chlorantraniliprole	6 + 28	Voliam Targo (suppression only)	Not after E-L 29 (peppercorn sized berries;

			diameter < 4 mm)
indoxacarb	22A	Avatar eVo, Incarnate 300 WG, Indoxacarb 300 WG, Lepta 300 WG, Spymaster 300 WG	Neither after E-L 31 (berries pea size; diameter < 7 mm) nor within 56 days of harvest
Mites (general including bunch and bud mites)			
sulphur, present as polysulphide	M2	Lime Sulphur	Apply as near as possible to budburst
sulphur, present as elemental or crystalline sulphur	M2	Cosamil, EcoSulfur 800WG, InnoSulph 800 WG, Microsul WG Elite, Nimbus WG, Sulfur 800 WG, Sulphur (800 WG, WG), Thiovit Jet, Zulfa 800WG	Not within 7 days of harvest
Grapeleaf blister mite and leaf rust mite (as for Mites and the following)			
paraffinic oil	n/a	Heavy Paraffinic Dormant Spray Oil	Dormant spray only
petroleum oil	n/a	Stifle, Vicol Winter Oil	
Grapeleaf rust mite (as for Mites and the following)			
chlorantraniliprole	6 + 28	Voliam Targo	Not after E-L 29 (peppercorn sized berries; diameter < 4 mm)
Two-spotted mite (as for Mites and the following)			
petroleum oil	n/a	Stiffle	Dormancy spray
chlorantraniliprole	6 + 28	Voliam Targo	Not after E-L 29 (peppercorn sized berries; diameter < 4 mm)
Grapevine moth			
chlorantraniliprole	28	Altacor (Hort, X-Force), Chlorantraniliprole 350 WG, Shenzi	Not after E-L 25 (80% capfall)
chlorantraniliprole	6 + 28	Voliam Targo	Not later than E-L 29 (peppercorn sized berries; diameter < 4 mm)
spinetoram	5	Delegate	Not after E-L 31 (berries pea-sized berries; diameter < 7 mm)
spinosad	5	Entrust Organic, Preserve 120 SC, SpinoSec 240 SC	

emamectin	6	Clama 50SC, Energise, Exclaim 44 SG, Oracle EC, Proclaim Opti	Neither later than EL-31 (as above) nor within 56 days of harvest
indoxacarb	22A	Avatar eVo, Indoxacarb 300 WG, Lepta 300 WG, Spymaster 300 WG	
<i>Bacillus thuringiensis</i> subspecies <i>aizawai</i>	11	Bacchus WG	Use till harvest
<i>Bacillus thuringiensis</i> subspecies <i>kurstaki</i>	11	Delfin, DiPel DF	
<i>Trichogrammanza carverae</i>	n/a	<i>Trichogramma</i> parasitic wasp	
Grapevine scale			
paraffinic oil	n/a	BioPest, CropCover, D-C-Maxx nC24, isoCLEAR HPO, Trump Spray Oil	Dormant spray only
petroleum oil	n/a	All Seasons White Oil, Summer Spray Oil, Stifle, Vicol (Summer Oil, Winter Oil)	
spirotetramat	23	Kersel 850 WG, Movento 240 SC, Spirotetramat 240 EC, Viento 240 SC ( <i>suppression only</i> )	Not after E-L 18 (14 leaves separated, flower caps still in place, cap colour fading)
Light Brown Apple Moth			
acetamiprid + pyriproxyfen	4A + 7C	Trivor	Not after E-L 19 (16 leaves separated, caps starting to loosen)
chlorantraniliprole	28	Altacor (Hort, X-Force), Chlorantraniliprole 350 WG, Onquit 825 WG, Shenzi	Not after E-L 25 (80% capfall)
methoxyfenozide	18	Enigma 240 SC, Peregrine, Prodigy, Slate 240, Venturi (Max)	
tebufenozide	18	Ecdypro 700 wp	
chlorantraniliprole	6 + 28	Voliam Targo	Not after E-L 29 (peppercorn sized berries; diameter < 4 mm)
spinetoram	5	Delegate	Not after E-L 31 (pea-sized berries;
spinosad	5	Entrust Organic, Preserve 120 SC, SpinoSec 240 SC	

			diameter < 7 mm)
emamectin	6	Clama 50SC, Energise, Exclaim 44 SG, Oracle EC, Proclaim Opti	Neither after E-L 31 (as above) nor later than 56 days before harvest
indoxacarb	22A	Avatar eVo, Indoxacarb 300 WG, Lepta 300 WG, Spymaster 300 WG	
<i>Bacillus thuringiensis</i> subspecies <i>aizawai</i>	11	Bacchus WG	Use till harvest
<i>Bacillus thuringiensis</i> subspecies <i>kurstaki</i>	11	Delfin, DiPel DF	
tetradecenyl acetate + tetradecadienyl acetate	n/a	Isomate LBAM Plus Pheromone	
<i>Trichogrammanza carverae</i>	n/a	Trichogramma parasitic wasp	
Mealybug			
paraffinic oil	n/a	BioPest, CropCover, isoCLEAR HPO, Trump Spray Oil	Dormant spray only
spirotetramat	23	Movento 240 SC, Spirotetramat 240 EC, Viento 240 SC	Not after E-L 18 (14 leaves separated, flower caps still in place, cap colour fading)
acetamiprid + pyriproxyfen	4A + 7C	Trivor	Not after E-L 19 (caps starting to loosen)
Mediterranean/Queensland Fruit Fly			
<ul style="list-style-type: none"><li>A baiting program that does not target fruit or foliage is recommended</li><li>Control options for fruit fly are subject to APVMA permit conditions</li><li>Contact your processor prior to any 1A, 1B, 2B or 3A insecticide</li></ul>			
Snails			
copper complex	(unspecified)	Escar-Go, Socusil	Dormant spray only
metaldehyde	(unspecified)	Axcela Slug and Snail, Metakill, Metaldehyde Snail and Slug, Metarex Inov Snail and Slug, Pestmaster Snail and Slug, Slug Out, Slugger Slug and Snail, Snailex, Snail Trail	Ground application only; not within 7 days of harvest
iron EDTA complex	(unspecified)	Eradicate-Snail and Slug Killer, Multiguard Snail and Slug Killer	

iron phosphate anhydrous	(unspecified)	Ironmax Pro	
iron powder	(unspecified)	Eradicate Eco, Eco-Shield	
Wingless grasshoppers			
indoxacarb	22A	Avatar eVo, Indoxacarb 300 WG, Lepta 300 WG, Persona 300WG, Spymaster 300 WG	Neither later than E-L 31 (berries pea-sized; diameter < 7 mm) nor within 56 days of harvest
Metarhizium anisopliae var. acridum	(unspecified)	Green Guard SC Premium	Not within 7 days of harvest
Earwigs			
indoxacarb	22A	Avatar	Not after E-L 25 (80% capfall)

Plant growth regulators		
<i>ethephon</i>	Ethephon (720, 720 SL, Xtra 900), Ethon 720, K-Ethephon, Promote (Opti, Plus 900)	
<i>gibberellic acid</i>	ProGibb SG, Windfall 800 SG	
<i>methyl esters of fatty acids</i>	Waiken	
Herbicides		
Active constituent(s)	Some common trade names	Critical comments
2-2-DPA-sodium (dalapon-sodium)	Dalapon 740 SP	Post-emergent systemic; grasses and broadleaf weeds; do not apply between flowering and harvest
amitrole + ammonium thiocyanate	Amitrole 250, Amitrole T	
amitrole + paraquat	Alliance, Guerilla	
diflufenican	Bentley, Colt, Cougar, DFF + Brom MX, Lobak, Meerkat, Ruger	Residual pre-emergent; broadleaf weeds; apply only when vines are fully dormant



carfentrazone-ethyl	Artillery, Carfentrazone (240 EC, 240 EW, 400 EC), Carfentrazone-ethyl 240 EC, Elevate (400 EC), Hammer 400 EC, Knocker 240 EC, Nail 600EC, Rage 400 EC, Spike, Spotlight Plus, Squatter 400 EC, Thrash 240EC	Post-emergent systemic; do not apply between flowering and harvest; use with a contact knockdown herbicide for improved control of broadleaf weeds
diquat	Desiquat, Dia-Kill 200, Diquat (200, 200 SL), Reglone, Sanction 200	Non-selective contact knockdown; annual broadleaf weeds and grasses
diquat + paraquat	Blowout, Brown Out 250, Combik 250, Di-Par 250, EOS, Paradat, Paraquat + Diquat 250, Revolver, Scorcher 250, Speedy 250, Spray Seed 250, Squadron 250	
fluazifop-P	Cannonade 212 EC, Fluazaway 212, Fluazifop (212), Fusilade Forte, Fuzilier, Rootout 212	Post-emergent systemic; grasses only
flumioxazin	Chateau, Spektrum 500 WG	Residual pre-emergent; some grasses and broadleaf weeds
glufosinate-ammonium	Basta, Beast 200, Biffo, Cease, Commando 200, Exile, Exonerate (200 SL), Fascinate (280SL, Dry), Faster-TG 200, Fiestar, Fosinate 200 SL, Gamma, Glufonium 200 SL, Glufos, Glufosinate (200, 800 SG), Glufosinate-Ammonium 200, G-FOS 200, Muster, Notch 200 SL	Partially systemic knockdown; non-selective
glufosinate-ammonium + carfentrazone-ethyl	Hellcat	Post-emergent systemic; non-selective
glyphosate acid	Moonshine	
glyphosate-ipa	AllOut 450, Chisel 450, Cropmaster 450, Erazo (360, Bi-aquatic, 510 Bi-aquatic), Glister (360, 450), Glypho 450, Glyphosate (360, 450, 450 CT, 450 SL, 510), Ken-Up (450 CT, 500 Flexi, Aquatic 360), Knockout 450, Musta 450, Panzer 450, Pestmaster (Aqua-Tech 360, Glyphosate CT), Raze, Rico 450 GLY, Roundup (Biactive, CT), SixGun (360, 510), SquareDown 360, Weedpro (540 Bio, BioAqua 360), Wipe-Out (450, Bio)	
glyphosate-ipa + mas	Weedmaster Duo	
glyphosate-mas	Bazooka Dry 800 SG, Glister 680 SG, GLY 680 Dry, Glyphosate (680, 700, 700SG, 875, 900), Ken-Up Dry 680 WG, Knockout Dry 700 SG, Roundup Ready Plantshield	
glyphosate-mea	Glyphosate 450 SL, Wipe-Out Pro	

glyphosate-potassium salt	Cropmaster Ultra 540, Firebolt, Glyphosate (540K, 570), GLY 540 SL, Gold TX 540 GLY, Ken-Up Dry Super K, Knockout Extreme, Max Out 540, Rico HPS 540 GLY, Roundup (Dura, Ready PL, Ultra MAX), Warlord 540 Hi-Load	
glyphosate-potassium salt + ipa	Weedmaster Argo	
glyphosate-potassium salt + mas	Weedmaster Dual Salt Technology	
glyphosate-potassium salt + mea	Glyphosate 550 Twin Salt, Knockout 550, Max Out 600 Duo, Promix 550 GLY	
nonanoic acid	Basher, Beloukha, Brut, Ion, Neo, Slasher, Slayer Organic, Weed Terminator	Contact knockdown
paraquat	Explode (250, 300Plus, 360), Gramoxone 360 Pro, P-Quat (250 SL, 300 SL), Par-Q 250, Para-Ken (250, 334), Paradox 250, Paraquat (250, 250 SL, 300, 360SL), Parashot (250, Plus 360), Powerquat 300 SL, Shirquat 250, Sinmosa 250, Sprayquat 250, Spraytop (250SL, 330)	Non-selective contact knockdown
pendimethalin	Charger 330 EC, Cronos 440EC, Cyclone 330 EC, Panda 435, Panida Grande, Pendimethalin (330, 330EC, 440, 440 EC), Pendi-M 330	Residual pre-emergent with some post-emergent activity; annual grasses and broadleaf weeds; apply during dormancy
pine oil	BioWeed	Contact post-emergent knockdown; suitable for organic production systems
quizalofop-P-ethyl	A tomic Selective, Elantra Xtreme, Leopard (200 EC), Quiz, Quizalofop 200EC, Quizalofop-P-ethyl (200, 200 EC), Sextant, Tiger Gold 250	Post-emergent systemic; annual and perennial grasses
simazine	Simanex 900 WG, Simaquest 900 WG, Simazine (500 Flowable, 900 WDG, 900 WG), S-Zine (600 SC, 900)	Residual pre-emergent; non-selective