The Australian Wine Research Institute

Agrochemical Update 2018 Mildura

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“Not recommended for export wines”

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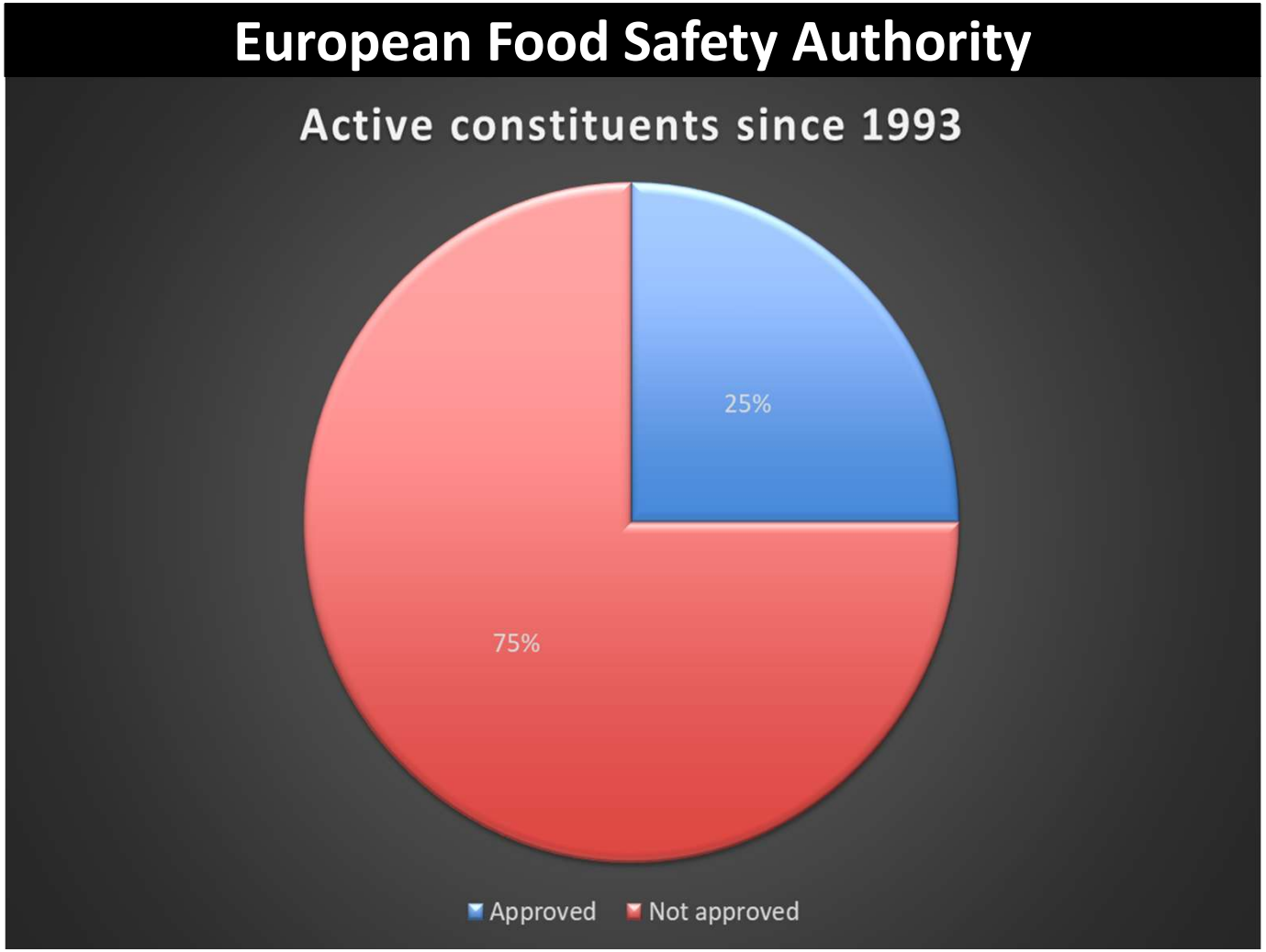
- Boscalid
- Captan
- Iprodione
- Phosphorous acid
- Procymidone



New active for powdery

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PYDIFLUMETOFEN

Name:	Miravis
APVMA:	82484
Target:	Powdery mildew
Manufacturer:	Syngenta
Activity Group:	7
WHP (export):	DO NOT apply after growth stage EL 19 (about 16 leaves separated; beginning of flowering (first flower caps loosening)
MRL:	Australia: 0.1 mg/kg – to be ratified
Ferm / Sensory	No issues

New active for insect pests

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ABAMECTIN (+ CHLORANTRANILIPROLE) - Waiting for APVMA approval

Name:	Voliam Targo
Target:	LBAM, Grapevine moth, 2 spotted mite, Rust mite, Garden weevil (suppression)
Manufacturer:	Syngenta
Activity Group:	6 + 28
WHP (export):	DO NOT apply after growth stage EL 29 (Berries peppercorn sized, 4 mm).
MRL:	Australia: 0.02 mg/kg and 2.5 mg/kg
Ferm / Sensory	No issues

New active for botrytis

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Aureobasidium pullulans

Name:	Botector
Target:	Botrytis bunch rot
Manufacturer:	Distributed by Nufarm
Activity Group:	n/a
WHP (export):	Not required when used as directed.
Notes:	Botector must be applied when the temperature is below 25^{o}C, preferably under slow drying conditions. To ensure consistent protection against *Botrytis* infection, applications as a foliar spray into the bunch zone or the whole canopy.
MRL:	Not applicable
Ferm / Sensory	No issues

New active for botrytis

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Bacillus amyloliquefaciens formerly known as *Bacillus subtilis*

Name:	Serenade® Opti
Target:	Botrytis bunch rot
Manufacturer:	Bayer Cropscience
Activity Group:	44
WHP (export):	Can be used up to harvest
Notes:	As part of a preventative spray program, applications may be made at, but not limited to, flowering, pre bunch closure, veraison through to harvest.
MRL:	Not applicable
Ferm / Sensory	No issues

Withholding periods

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Where fungicides are directed

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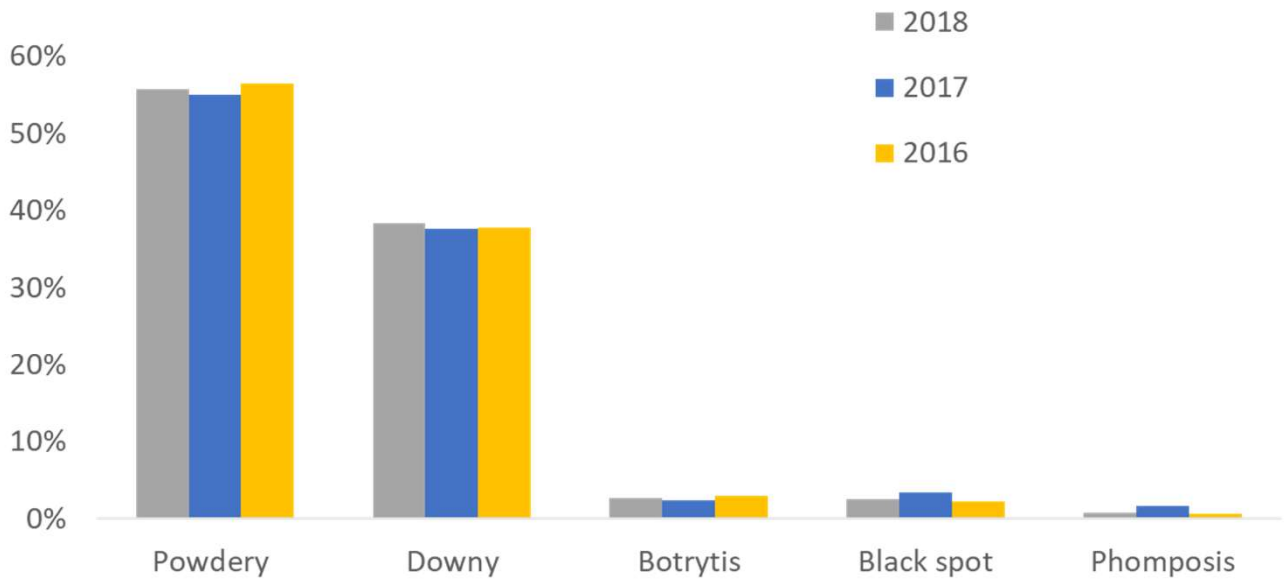

POWDERY MILDEW*			
boscalid[8]	7	Filan	Not recommended for use on grapes destined for export wines.
pydiflumetofen	7	Miravis	Use no later than E-L 19, beginning of flowering when caps start loosening.
difenoconazole	3	Digger	Use no later than 80% capfall.
metrafenone	U8	Vivando	
spiroxamine	5	Prosper 500 EC	
sulfur, elemental or crystalline sulfur	M2	Dusting Sulphur, Dusting Sulphur 900	Use no later than 12 weeks before harvest.
azoxystrobin	11	Affix 250SC, Amistar 250SC, A-Star 250 SC, Avior 250SC,	Use no later than E-L 29, berries pepper-corn size (not > 4 mm diameter).
sulfur + tebuconazole	M2 + 3	Unicorn 745WG	
tebuconazole	3	Buzz Ultra 750WG, Laguna Xtreme 800 WG, Launch, Orius 430 SC,Tebucon 430 SC, Ultrateb 750 WG, Zolo 430 SC	
tebuconazole + azoxystrobin	3 + 11	Custodia	
cyflufenamid	U6	Flute 50 EW	Use no later than E-L 31, berries pea-size (not > 7 mm diameter).
paraffinic oil	n/a	BioPest	
pyriofenone	U8	Kusabi 300 SC	
trifloxystrobin	11	Flint 500 WG	
pyraclostrobin	11	Cabrio, Pavo 250 EC, Symbio 250 EC	Use no later than E-L 31, berries pea-size AND do not use within 63 days of harvest.
penconazole	3	Azotic, Delos, Pearl, Ruby 100EC, Topas 100 EC	Use no later than E-L 31, berries pea-size AND do not use within 60 days of harvest.
tetraconazole	3	Domark 40ME, Mettle 40ME	

POWDERY MILDEW* *(CONT.)*			
quinoxyfen	13	Legend, Quinfen 250 SC	Use no later than E-L 34 (before commencement of veraison) AND do not use within 42 days of harvest.
triadimefon	3	Triadimefon 125	Use no later than 35 days before harvest.
triadimenol	3	Allitron, Bayfidan 250 EC, Citadel, Triadimenol 250 EC, Tridim 250 EC	
copper ammonium acetate	M1	Cop-IT	Use no later than 30 days before harvest.
copper ammonium complex	M1	Copperguard, Liquicop	
myclobutanil	3	Myclonil WG, Mycloss Xtra	
proquinazid	13	Talendo	
sulfur, present as elemental or crystalline sulfur	M2	Brimflo 800, Cosamil, Cosavet WG, Flosul 800, InnoSulph 800 WG, Kendon Sulphur, Kumulus DF, Microsul WG Elite, Microthiol Disperss, Rutec Sulfur, Solo 800WG, Sulfur 800 WG, Sulgran WG, Sulphur Spray, Sulphur 800 WG, Sulphur WG, Thiovit Jet, Uni-Shield, Wettable Sulphur, Zulfa 800WG	
sulfur + copper oxychloride	M2 + M1	Mildex WG	
hydrogen peroxide + peroxyacetic acid	M + M	Peratec PLUS (suppression only)	Use no later than 7 days before harvest.
potassium bicarbonate	M2	Ecocarb	

* Review resistance management strategies on pages 23 to 27.

2. Contact your winery or grape purchaser prior to the application of any boscalid spray.

Murray Darling
Timing of powdery sprays 2018

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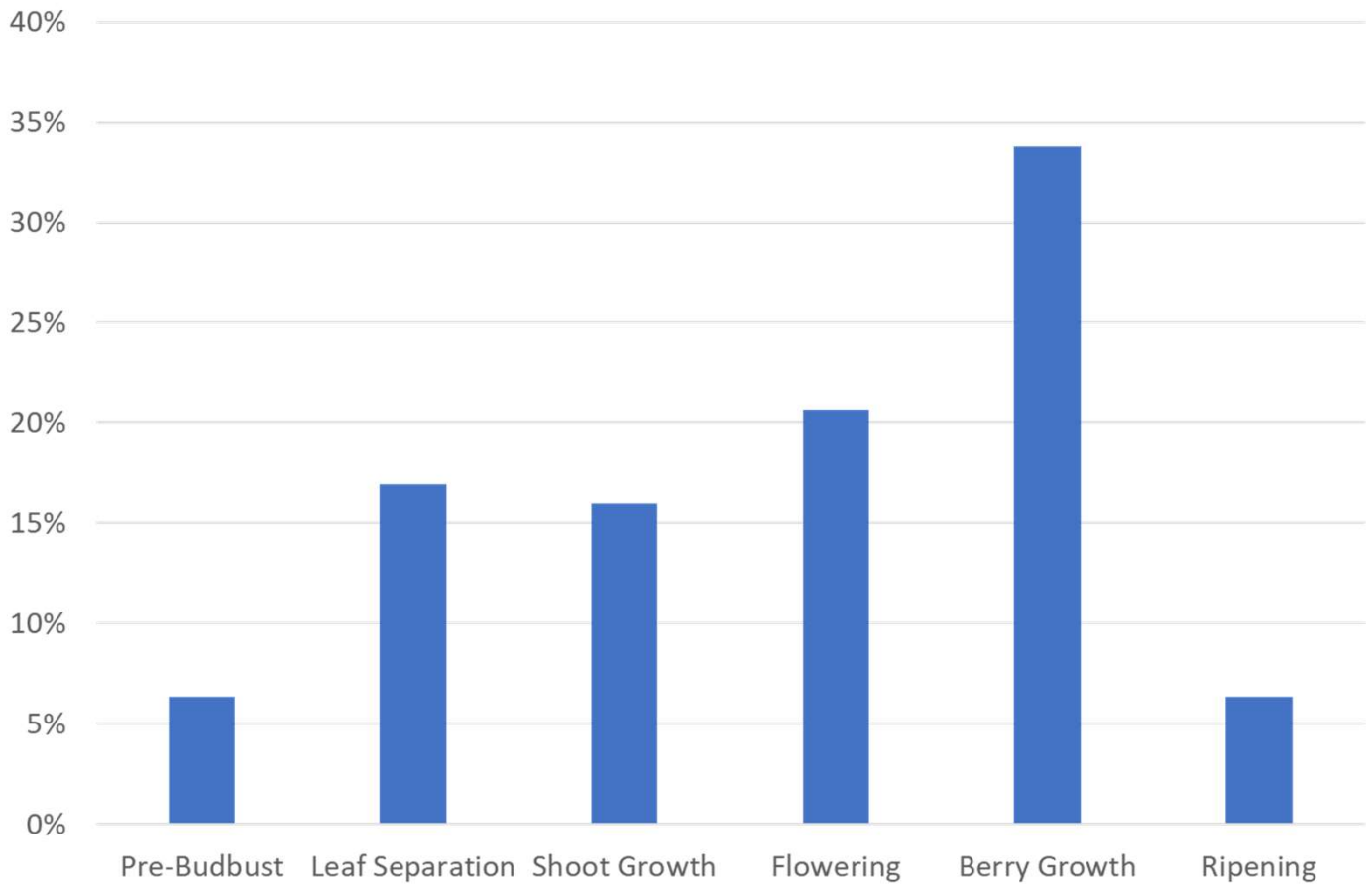

Murray Darling
Timing of powdery sprays 2018 and 2017

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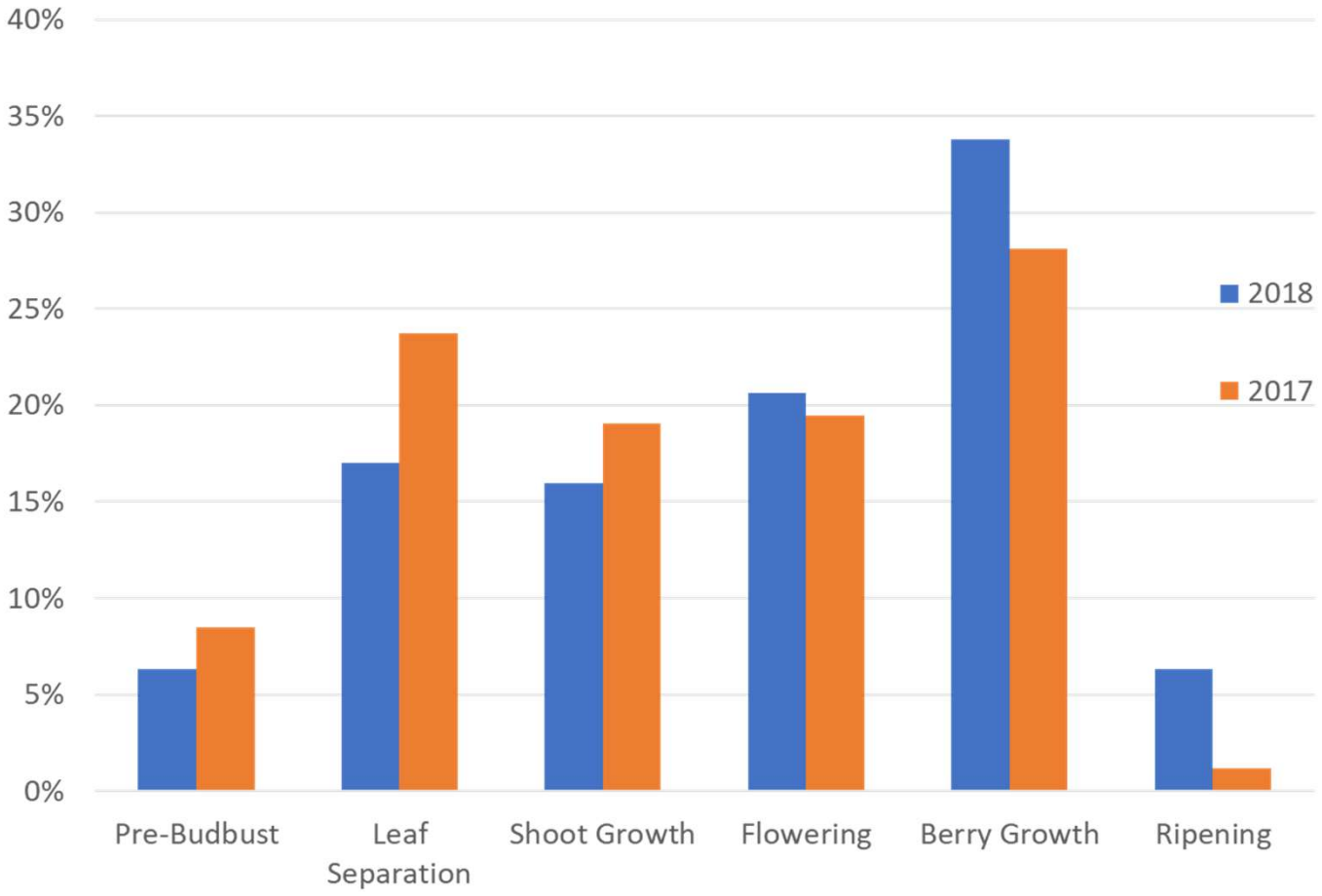

DOWNY MILDEW*			
captan[5]	M4	Captan, Captan 800 WG, Captan 900 WG, Captan WG	Not recommended for grapes destined for export wines.
phosphorous acid[5]	33	Agri-Fos 600, CropDoc 600,	
metiram	M3	Polyram DF	Use no later than 80% capfall.
oxadixyl + propineb	4 + M3	Rebound WP	
zineb	M3	Zineb	
mandipropamid	40	Revus	Use no later than E-L 26 (capfall complete).
azoxystrobin	11	Affix 250SC, Amistar 250SC,	Use no later than E-L 29, berries pepper-corn size (not > 4 mm diameter).
chlorothalonil	M5	Applonil 720, Barrack 720,	
tebuconazole + azoxystrobin	3 + 11	Custodia	
ametoctradin + dimethomorph[6]	45 + 40	Zampro	Use no later than E-L 31, berries pea-size (not > 7 mm diameter).
amisulbrom + tribasic copper sulphate	21 + M1	Amicus Blue	
dimethomorph[6]	40	Acrobat SC, Downright, Sphinx	
trifloxystrobin	11	Flint 500 WG (suppression only)	
pyraclostrobin	11	Cabrio, Pavo 250 EC, Symbio 250 EC	Use no later than E-L 31, berries pea-size (not > 7 mm diameter) AND do not use within 63 days of harvest.
copper ammonium acetate	M1	Cop-IT	Use no later than 30 days before harvest.
copper ammonium complex	M1	Copperguard, Liquicop	
copper cuprous oxide	M1	Nordox 750 WG, Red Copper WG	
copper hydroxide	M1	Blue Shield DF, Champ 500WG, Champ Dry Prill WG, Flo-Bordo, Hydrocop WG, Kocide Blue Xtra, Kocide Opti, Vitra 400 WG	
copper octanoate	M1	Tricop	
copper oxychloride	M1	Cobox 500 WP, Copper Oxychloride, Copper Oxychloride 500 WP, Copper Oxychloride WP, Coppox WG, Coppox WP, Cupro 375WG, Isacop 500WP, Neoram 375 WG, Oxydul DF, Uni-Guard 500 WP	
copper oxychloride + copper hydroxide	M1 + M1	Airone WG	
copper sulfate tribasic	M1	Bordeaux WG, Tri-Base Blue, Tribasic Liquid	

DOWNY MILDEW* *(CONT.)*			
copper sulfate tribasic + mancozeb	M1 + M3	Copman DF, Novofix Disperss	Use no later than 30 days before harvest.
dithianon	M9	Delan 700 WG, Dinon 700 WG, Dragon 700 WG, Wrath 700WG	
mancozeb	M3	Dithane Rainshield Neo Tec, Fortuna Globe 750WG, Kencozeb 750DF, Mancozeb 750 DF, Mancozeb 750 WG, Mancozeb DF, Manic WG, Mantra 750WG, Manzate DF, Manzeb, Penncozeb 750DF, Sinozeb 750 WG, Unizeb Disperss 750 DF	
metalaxyl - M + copper hydroxide	4 + M1	Ridomil Gold Plus	
metalaxyl - M + mancozeb	4 + M3	Ridomil Gold MZ WG	
metalaxyl + copper oxychloride	4 + M1	Axiom Plus, Copper Plus, Metalaxyl + Copper Oxychloride WP, Zeemil Plus	
metalaxyl + mancozeb	4 + M3	Axiom MZ 720, Max MZ, Maxyl, Metal-Man MZ 720, Zeemil 720WG, Zeemil MZB 720 WP	
sulfur + copper oxychloride	M2 + M1	Mildex WG	
hydrogen peroxide + peroxyacetic acid	M + M	Peratec PLUS (suppression only)	Use no later than 7 days before harvest.

BOTRYTIS BUNCH ROT*			
boscalid[1]	7	Filan	Not recommended for use on grapes destined for export wines.
captan[1]	M4	Captan, Captan 800 WG, Captan 900 WG, Captan WG	
iprodione[1]	2	Aquaflow 500 SC, Chief 250 Liquid, Chief Aquaflo, Ippon 500 Aquaflo, Ipral 250, Iprine 250, Iprine 500, Iprodex 250, Iprodione 250, Iprodione Aquaflow 500, Rovral Aquaflo, Rovral Liquid, Shelby 250, Sindon 500	
fenhexamid	17	Teldor 500 SC	Use no later than 80% capfall.
pyrimethanil[2]	9	Predict 600SC, Protector 400SC, Pyrus 400 SC, Scala 400 SC, Scala 600 SC	
azoxystrobin	11	Affix 250 SC, Amistar 250 SC,	Use no later than E-L 29, berries pepper-corn size (not > 4 mm diameter).
chlorothalonil	M5	Applonil 720, Barrack 720, Barrack Betterstick,	
fenpyrazamine[3]	17	Prolectus	
tebuconazole + azoxystrobin	3 + 11	Custodia	
cyprodinil[4]	9	Solaris 300 EC	Use no later than E-L 29, berries pepper-corn size AND do not use within 60 days.
cyprodinil + fludioxonil[4]	9 + 12	Cyprofludox WG, Missile, Switch	
potassium salts of fatty acids	U1	Ecoprotector	Use no later than 14 days before harvest.
hydrogen peroxide + peroxyacetic acid	M + M	Peracetic Acid, Peratec, Peratec PLUS, Peroxy Treat (suppression only)	Use no later than 7 days before harvest.
Aureobasidium pullulans	n/a	Botector	May be used until harvest
Bacillus Amyloliquefaciens	44	Serenade Opti	

* Review resistance management strategies on pages 23 to 27.
1. Contact your winery or grape purchaser prior to the application of any captan or boscalid spray.
2. Apply no more than 800 g active per hectare (maximum 2 L of 400 SC and 1.33 L of 600SC formulations).
3. Do not apply more than one spray per season of a product containing fenpyrazamine.
4. Do not apply products containing cyprodinil at both flowering and growth stage E-L 29.

Was E-L 25

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LIGHT BROWN APPLE MOTH			
chlorantraniliprole	28	Altacor Hort	Use no later than 80% capfall.
methoxyfenozide	18	Peregrine, Prodigy	
chlorantraniliprole + abamectin	28 + 6	Voliam Targo Not registered yet	Use no later than E-L 29.
spinetoram	5	Delegate	Use no later than E-L 31, berries pea-size (not > 7 mm diameter).
emamectin	6	Energise, Proclaim, Warlock	Use no later than E-L 31, berries pea-size (not > 7 mm diameter) AND do not use within 56 days of harvest.
indoxacarb	22A	Avatar, Persona 300WG, Spymaster 300 WG.	
Bacillus thuringiensis subspecies *aizawai*	11	Bacchus WG,	May be used until harvest.
Bacillus thuringiensis subspecies *kurstaki*	11	Delfin, DiPel DF	
tetradecenyl acetate + tetradecadienyl acetate	n/a	Isomate LBAM Plus Pheromone, MD LBAM Corto, MD LBAM Flex Pheromone, MD LBAM Pheromone	
Trichogrammanza carverae	n/a	Trichogramma parasitic wasp	

Timing of LBAM sprays

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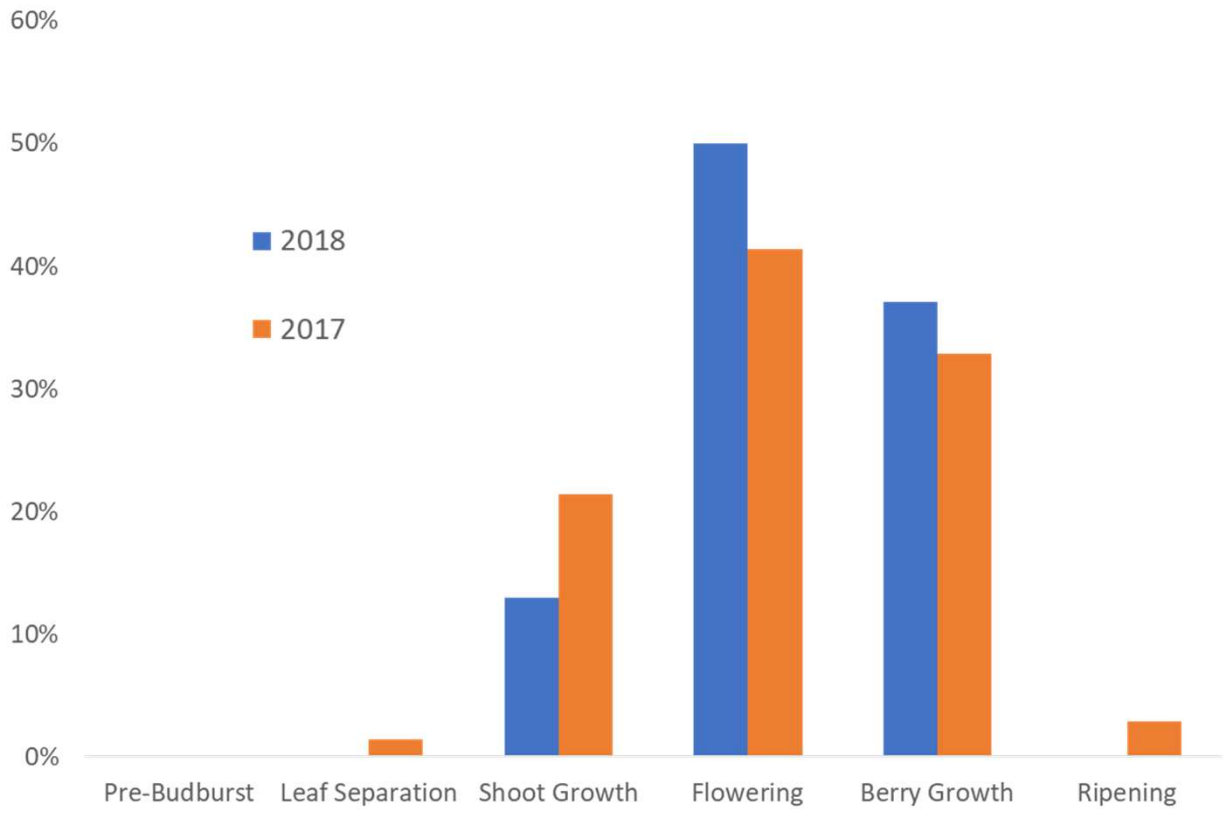

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