TECHNICAL GUIDE

Merivon®
Fungicide

Your first-choice fungicide for smarter control

BASF
We create chemistry

Merivon®
Fungicide

A first-choice fungicide to protect valuable crops

Merivon® has quickly established itself as the stand-out option among co-formulated Group 7 and 11 fungicides for its excellent efficacy, adaptability and favourable regulatory profile.

Merivon combines the proven reliability of a well-established Group 11 active ingredient with a new Group 7 fungicide offering innovative features that promote rapid uptake and extended residual activity. Merivon also promotes extra crop vigour and associated plant health benefits.

Trials show that using Merivon in rotation with Belanty® Fungicide in crops where they are both registered, can achieve better protection throughout critical crop stages than using other products with the same basic modes of action.

Contents

Product profile

Active ingredient	Pyraclostrobin 250 g/L Fluxapyroxad 250 g/L
Mode of action	Group 7 – SDHI Group 11 – QoI
Formulation	Suspension Concentrate (SC)
Adjuvant	Not required
Compatibility	Merivon is compatible with most commonly used crop protection products, refer to compatibility list on page 6.
Withholding periods	Almonds and macadamias: 21 days Cherries: 2 days All other registered crops: Nil
Rainfastness	Rapid uptake and excellent rainfastness (as soon as dry on the leaf).
IPM fit	Merivon is compatible with most products used in IPM programs and has low impact on beneficial insects, pollinator insects such as bees, and birds
Pack size	10L

Crop and disease registrations

	Almonds	Macadamias	Cherries	Lemons / Tangelos	Mangoes	Curcurbits	Fruiting vegetables
Alternaria leaf spot	✔						
Anthracnose	✔				✔		
Blossom blight/ brown rot/mould	✔		✔	✔			
Emperor brown spot				✔			
Gummy stem blight						✔	
Hull rot	✔						
Husk spot		✔					
Leaf rust	✔						
Powdery mildew					✔	✔	✔
Scab/freckle	✔						
Shot hole	✔						
Target spot							✔

Modes of action

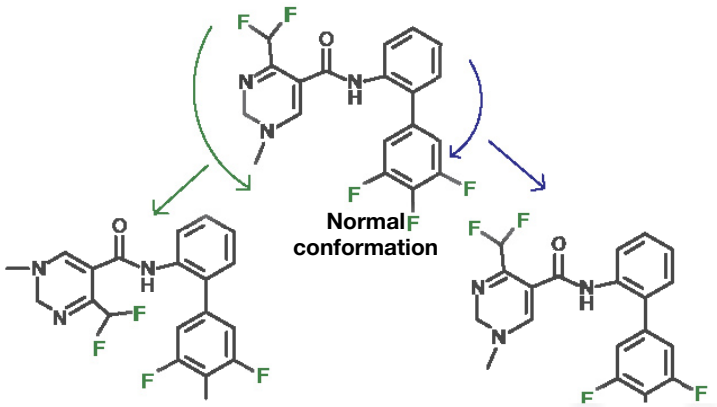
Merivon is a co-formulation of two active ingredients with contrasting and complementary modes of action.

Pyraclostrobin

Pyraclostrobin is a strobilurin (QoI) fungicide that has proved its reliability over many seasons of regular use in nut and fruit crops as the active ingredient in Cabrio®.

Fluxapyroxad

A key advantage of Merivon is that its fluxapyroxad molecule can switch conformations to facilitate penetration into and movement throughout the leaf.



'Non-polar' = lipophilic

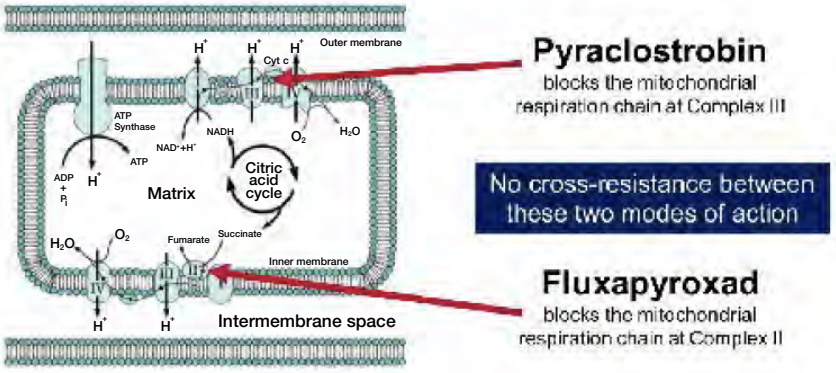
Important forr movement in wax layers and membranes

'Polar' = hydrophilic

Important forr movement in cell walls and the vascular system

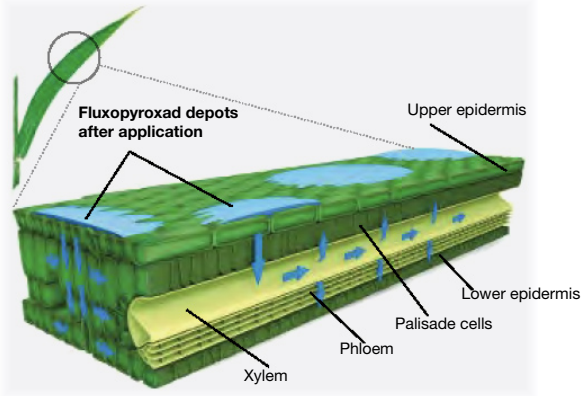
Different sites of action

Their two different sites of action ensure there will never be any cross-resistance between the two Merivon actives.



Key fluxapyroxad advantages

Fluxapyroxad is quickly adsorbed to the waxy surface of the leaf in its non-polar form, then steadily released into the transpiration stream in its hydrophilic polar conformation for thorough distribution.



Key pyraclostrobin advantages

In plant cells, the active ingredient is rapidly absorbed and bound into the waxy cuticle.

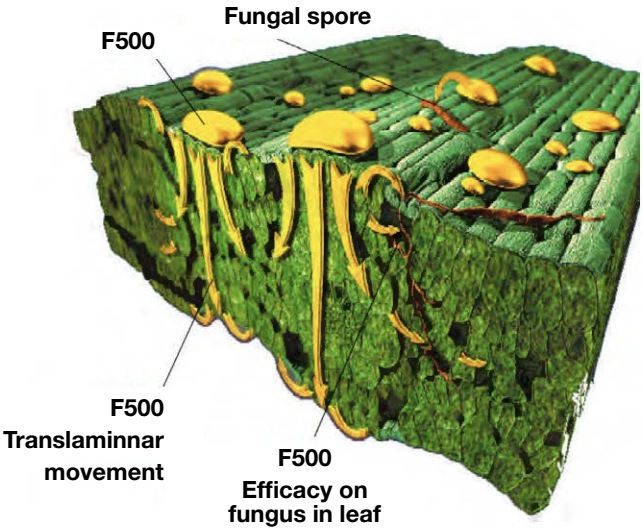
Pyraclostrobin is not lost to evaporation or lost to rainfall.

Rapid adsorption = excellent rainfastness

Steady release = extended protective activity

Pyraclostrobin (F500)

F500 is highly lipophilic (Log Pow 3.99) and water solubility is low. Most of applied product is absorbed to and remains bound in the waxy cuticle. Deposits of F500 form reservoirs from which active is slowly released into the plant.



IPM fit

Merivon has low impact on beneficial insects, including pollinators.

Merivon can strengthen IPM programs both through its excellent safety profile and its efficiency: its ability to achieve high levels of long-lasting control at relatively low rates means less total chemical in the environment.

Merivon is compatible with most other products used in IPM programs and has low impact on beneficial insects, pollinator insects such as bees, and birds.

Merivon is very toxic to aquatic organisms.

Merivon ecotoxicology

	Fluxapyroxad	Pyraclostrobin
Honeybees	Practically non-toxic	Practically non-toxic
Birds	Practically non-toxic	Practically non-toxic
Fish	LC_{50} 534 ppb	LC_{50} 6.2 ppb
Invertebrates	Moderately toxic	Practically non-toxic

Tank-mix compatibility

Merivon is physically compatible with the fungicides and insecticides listed in the tables in a two-way tank-mix when both products are used as directed on their labels (maintain constant agitation throughout).

Merivon can be successfully tank-mixed with most commonly used products, except some emulsifiable concentrates. Testing is ongoing.

Compatible fungicides		
Acrobat® SC	Dithane* Rainshield*	Switch*
Bravo* Weather Stik*	Filan®	Top Wettable Sulphur
Captan* WG	Polyram® DF	Zampro*

Compatible insecticides		
Belt* 480 SC	Danisaraba®	Proclaim*
Calypso* 480 SC	Delegate*	Prodigy*
Chess*	Karate Zeon*	Success* Neo
Confidor* 200 SC	Lorsban* EC	Vydate*
Coragen*	Movento* 240 SC	

Merivon is also compatible with Regalis® Plus Plant Growth Regulator.

NOT compatible	May result in slight particulate formation.	
Blue Shield* DF Copper		Ziram Granuflo*

As formulations of other manufacturer's products are beyond the control of BASF, and the quality of water may vary with location, all mixtures should be tested prior to mixing commercial quantities. Physical compatibility of products does not necessarily guarantee biological compatibility. When determining physical compatibility of a product not listed above, or in mixes with Merivon more than a two-way mix, conduct a jar test prior to mixing commercial quantities.

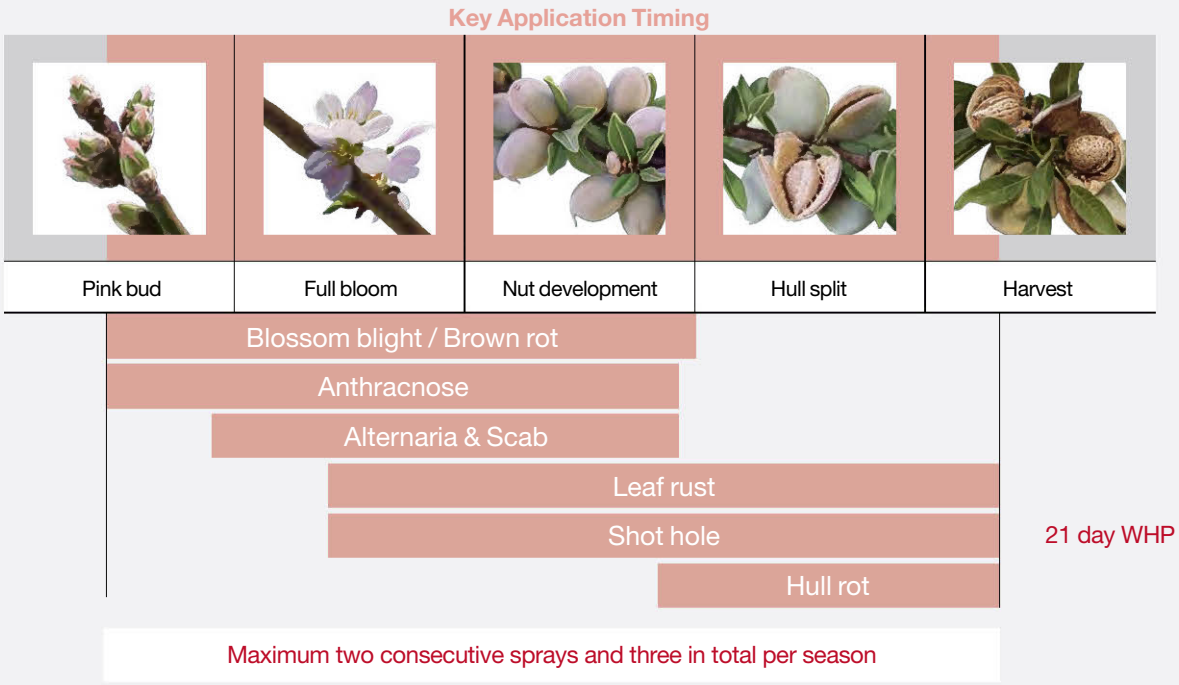
Tank-mix sequence

1. Fill the spray tank ½ full and start agitation
2. Add water conditioning agents
3. Add WG products
4. Add **Merivon** and any other SC products
5. (EC products would normally be added next, but some are ***incompatible*** with Merivon)
6. Add soluble liquid products
7. Top up the tank with extra water

Merivon for almonds

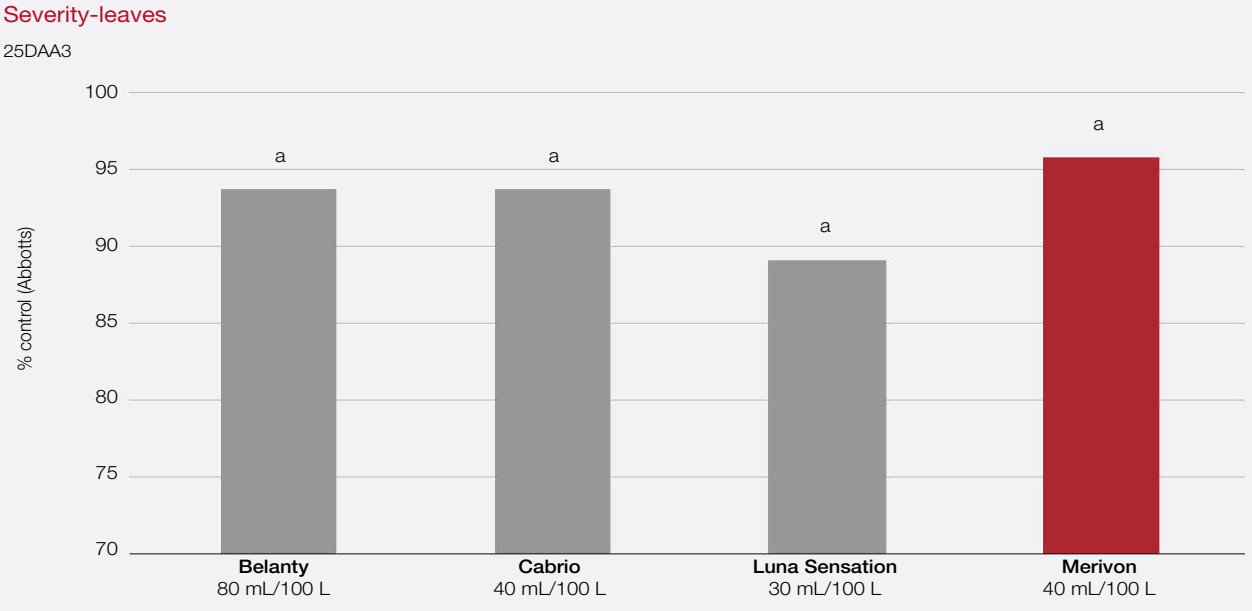
Application timing

Use Merivon in a preventative fungicide program with spray intervals of 10-21 days. For hull rot suppression, 2 applications should be made at 7-14 day intervals, commencing hull split. Always use the shorter interval period when conditions favour disease development.



*Growers should note that Maximum Residue Limits (MRLs) or import tolerances do not exist in all markets for treated nuts. Additionally, some export markets have established MRLs different to those in Australia. If you are growing nuts for export, please check with your local BASF representative for the latest information on MRLs and import tolerances BEFORE using any product.

Rust control in almonds



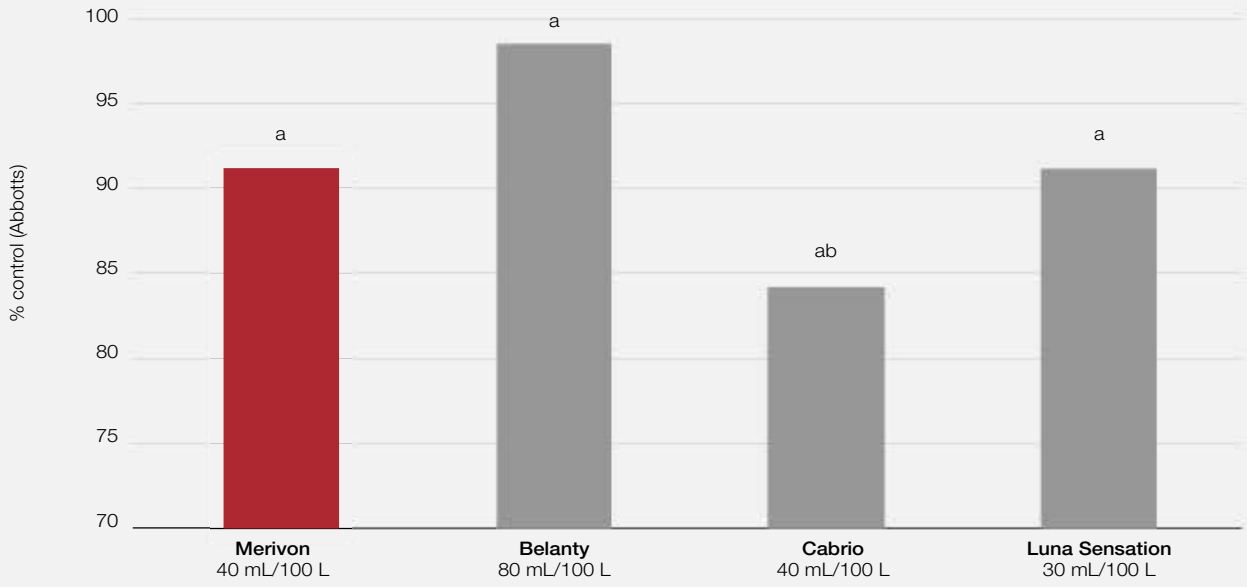
DEV-F-2016-AU-211-A-00.1-AU-ANV-DG1. Lake Powell VIC.

Merivon for almonds (cont.)

Efficacy on Shot hole

Severity-leaves

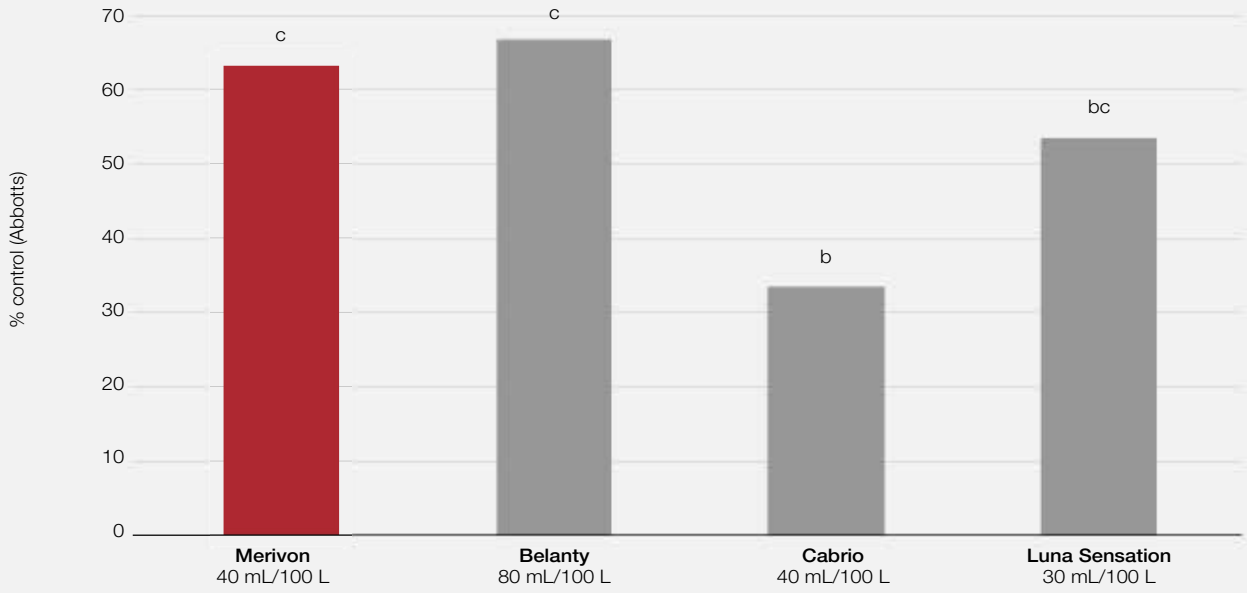
19DAA3



DEV-F-2016-AU-211-A-00.1-AU-AAU-001. Lake Powell, VIC.

Severity-leaves

49DAA4



DEV-F-2017-AU-207-A-00.1-AU-ASA-001. Virginia, SA.

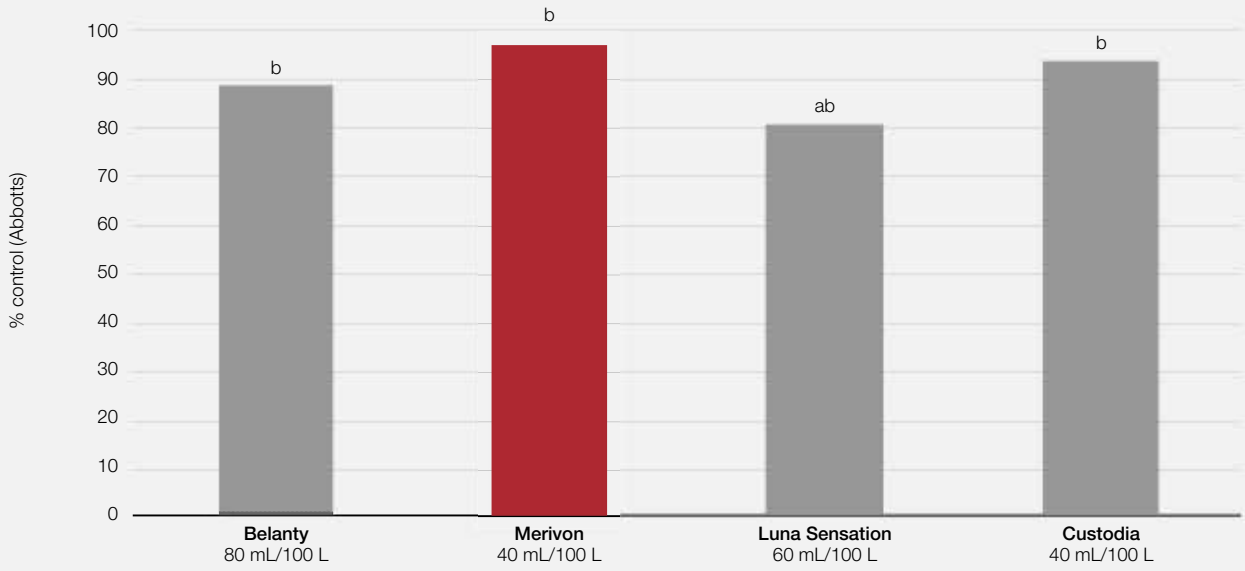
Merivon for almonds (cont.)

Efficacy on Blossom blight/ Brown rot

Class-leading, flexible control of Blossom Blight, Shot Hole and Hull Rot and suppression of Leaf Rust in almonds.

Severity-flowers

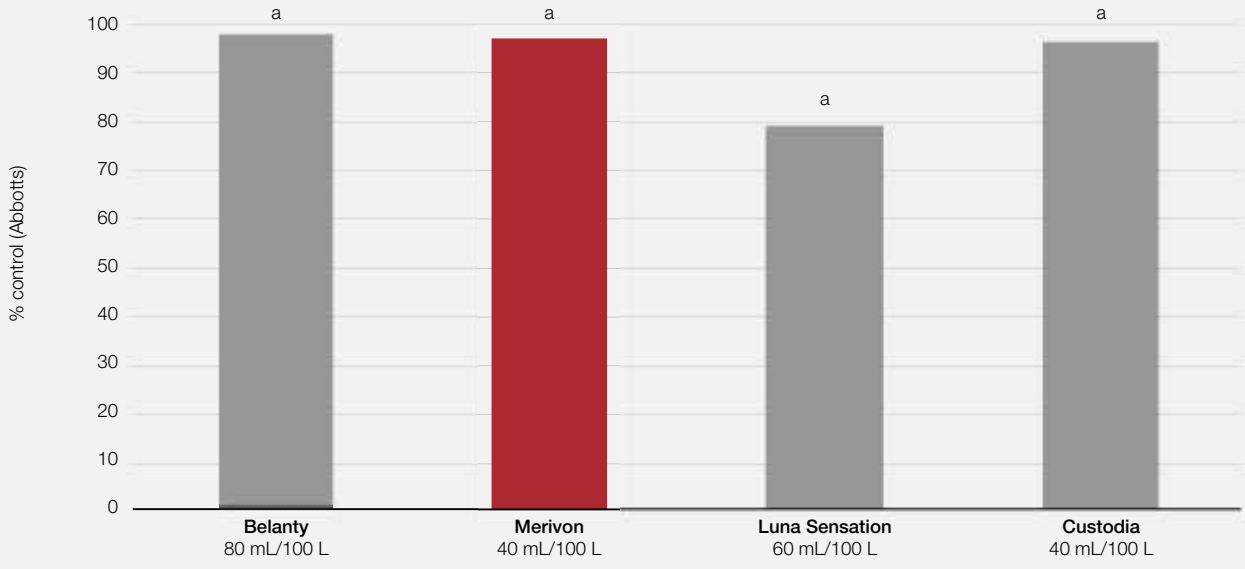
29DAA3



DEV-F-2019-AU-207-A-00.1-AU-ASA-151. Angle Vale SA

Severity-shoots

29DAA3



DEV-F-2019-AU-207-A-00.1-AU-ASA-151. Angle Vale SA

Merivon for macadamias

Application timing

Merivon can be applied a total of three times from the match-head growth stage. The two permitted consecutive applications should be 21 days apart.

Key Application Timing

Pre-flowering	Early flowering	Peak flowering	Match head	Spring flush	Shell hardening	Harvest

Husk spot — 21 day WHP

Maximum two consecutive sprays and three in total per season

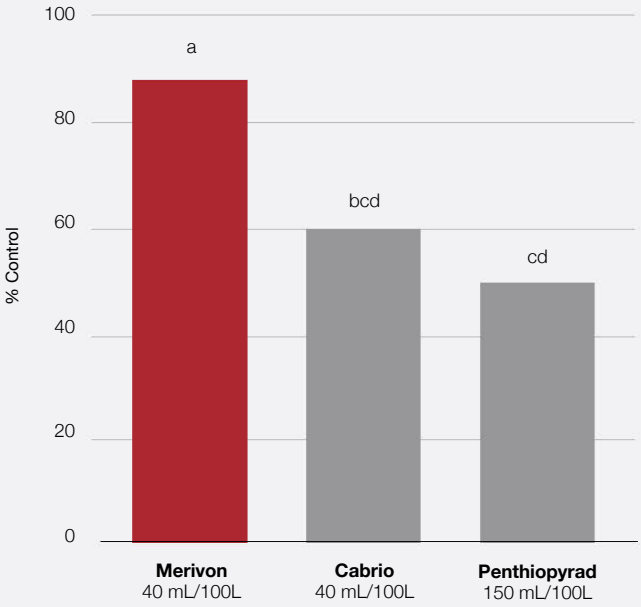
Husk spot control

Trial results show Merivon to be an excellent option for the control of husk spot.

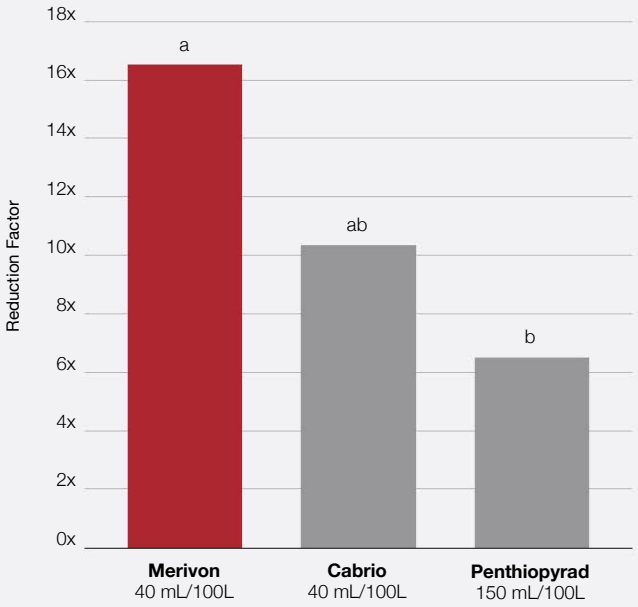
Reduced immature nut drop

The use of Merivon in a spray program shows significant benefit over other chemistries in reducing immature nut drop.

Husk spot control in macadamias



Reduction factor by weight of fallen unripe nuts compared to control

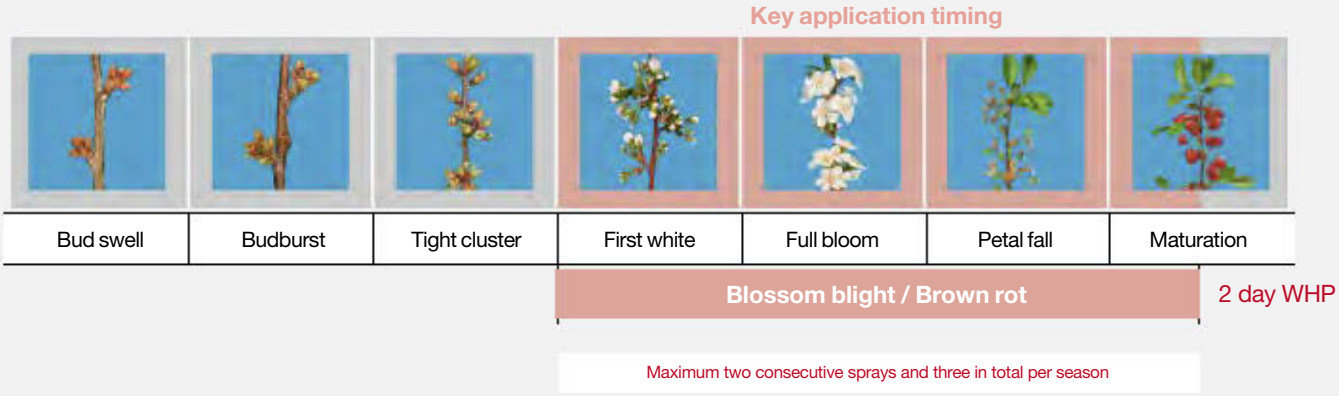


DEV-F-2015-AU-323-A-01.0-X01 (Churchill Monroe Consulting). 2015. Donnellyville, NSW. A16 macadamias.

Merivon for cherries

Application timing

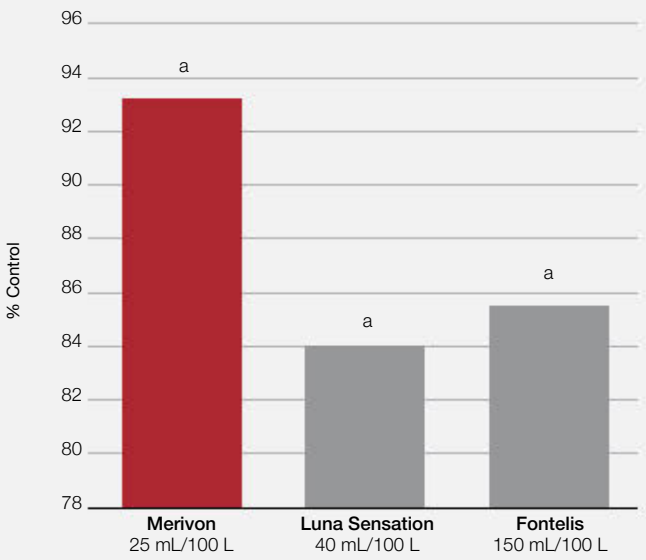
For best control, make the first Merivon application at early flowering and a second at full bloom.



Blossom blight / Brown rot control

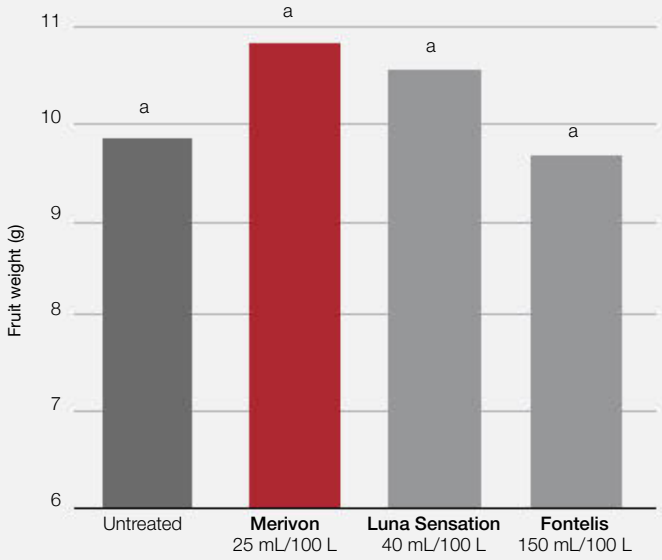
High levels of blossom blight control are shown by using Merivon in a program over flowering in cherries.

21DAA3



Fruit weight at harvest

Use of Merivon in a program showed an increase in the overall mean fruit weight of the cherries harvested.



DEV-F-2015-AU-324-A-01.0 (Peracto, 2016). Spreyton TAS. Cherry cv Simone. 3x applications

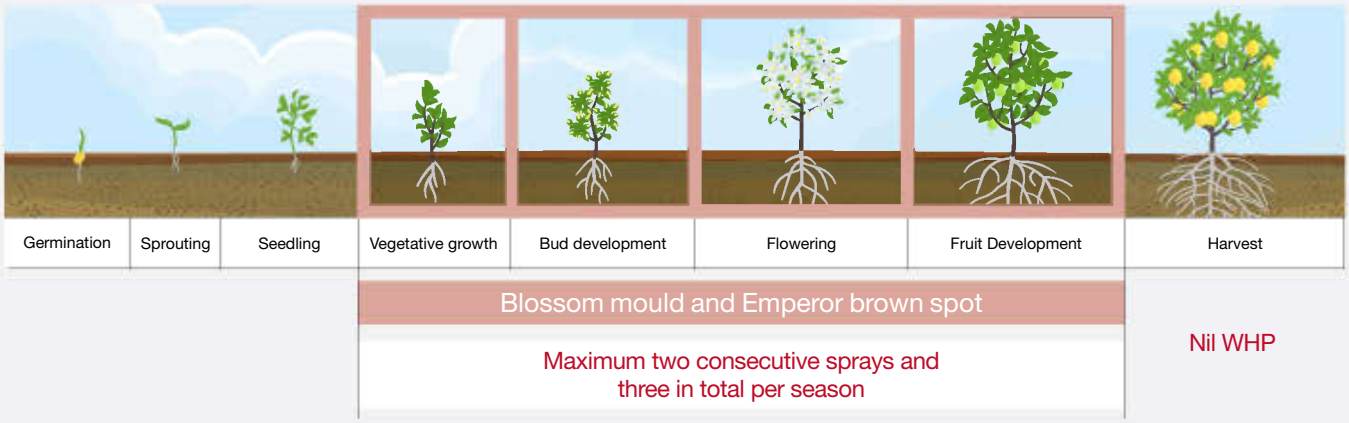
Merivon for lemons and tangelos

Application timing

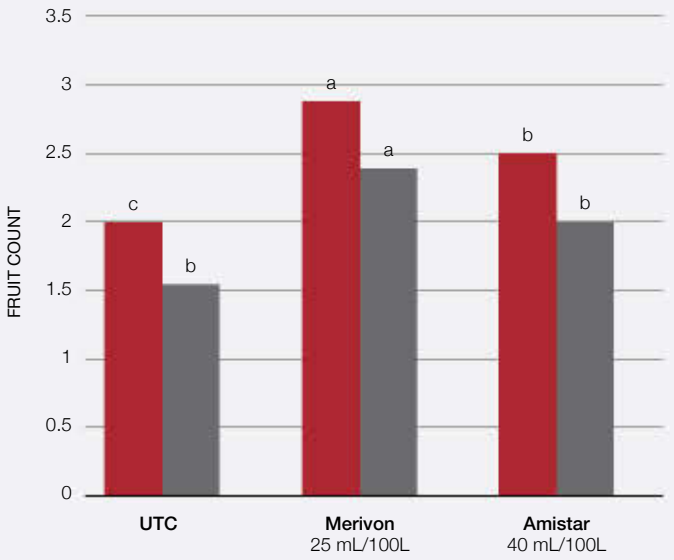
Use preventatively, prior to disease development. The two consecutive Merivon applications should be made 7–14 days apart. Use the shorter interval if conditions favour disease development.

A maximum of 3 applications of Merivon can be applied per year with no more than 2 consecutive sprays per year. Ensure that fungicides from alternative chemical groups are included in the spray program each season.

Key application timing



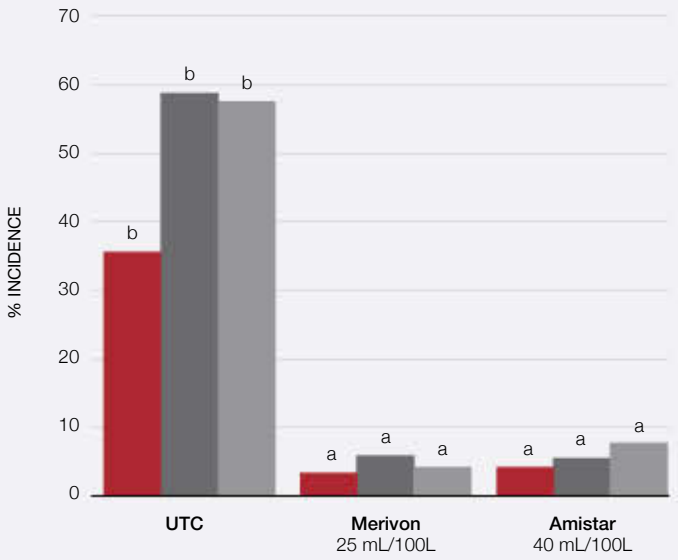
Blossom mould in lemons *(Botrytis cinerea)*



S16-07451-01-HIA-ST6006.
2019. Childers QLD.
Lemons cv Eureka.

13DAAB
21DAAC

Emperor brown spot in tangelo *(Alternaria alternata)*



S16-07449-01-HIA-S16006.
Gayndah, North Burnett, QLD.
Tangelo cv Minneola.

20DAAB
140DAAC
62DAAC

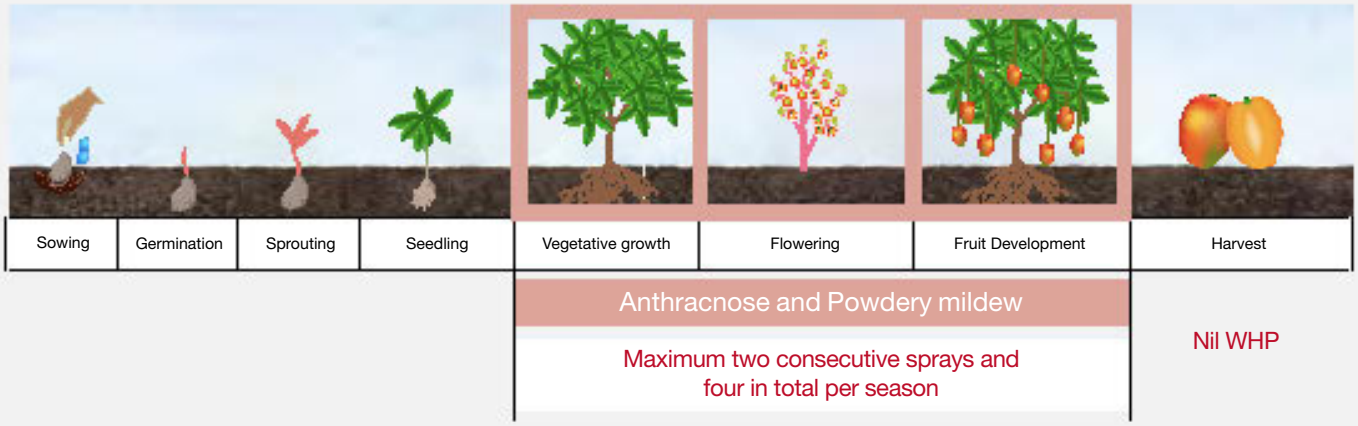
Merivon for mangoes

Application timing

Use preventatively, prior to disease development. The two consecutive Merivon applications should be made 14 days apart. Use the shorter interval if conditions favour disease development.

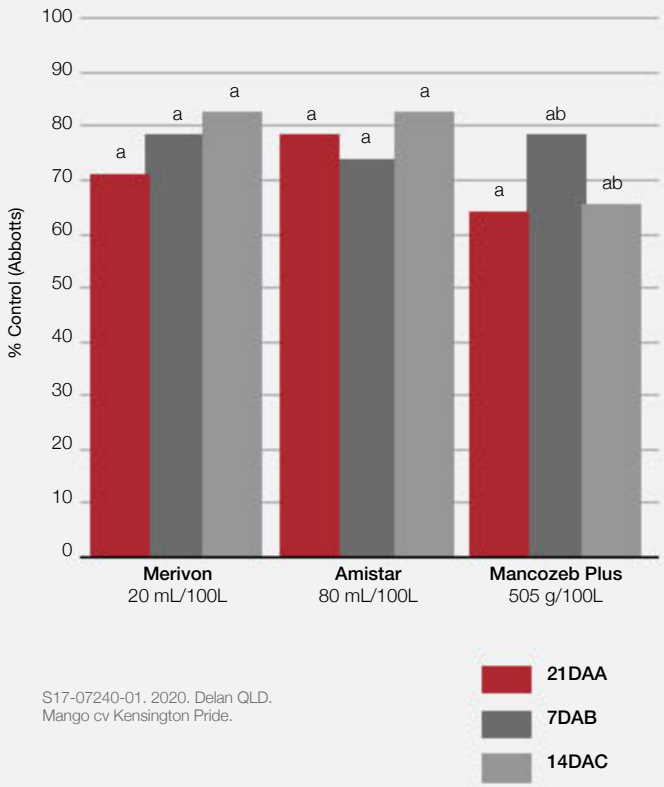
Merivon can be applied a maximum of 4 times per year, with no more than 2 consecutive sprays.

Key application timing



Anthracnose in mangoes

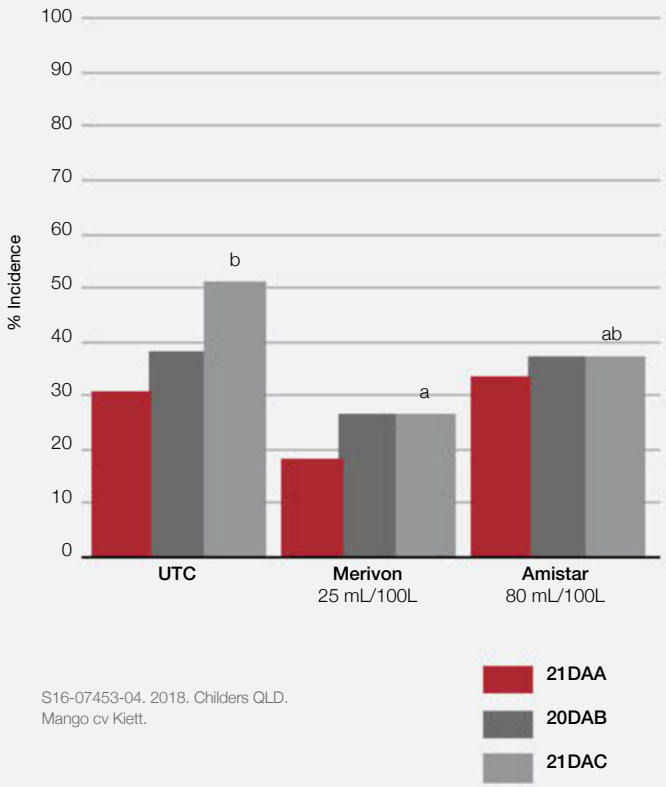
Severity - leaves



S17-07240-01. 2020. Delan QLD.
Mango cv Kensington Pride.

Powdery mildew in mangoes

Incidence shoots



S16-07453-04. 2018. Childers QLD.
Mango cv Kiett.

Merivon for cucurbits

Application timing

Apply Merivon preventatively with spray intervals of 7 to 14 days. Use the shorter interval if conditions favour disease development. Tank-mixing Merivon with a protectant fungicide such as Polyram is recommended.

Key application timing

Establishment	Vegetable growth	Flowering	Fruit set	Fruit development	Harvest

Powdery mildew and Gummy stem blight — Nil WHP

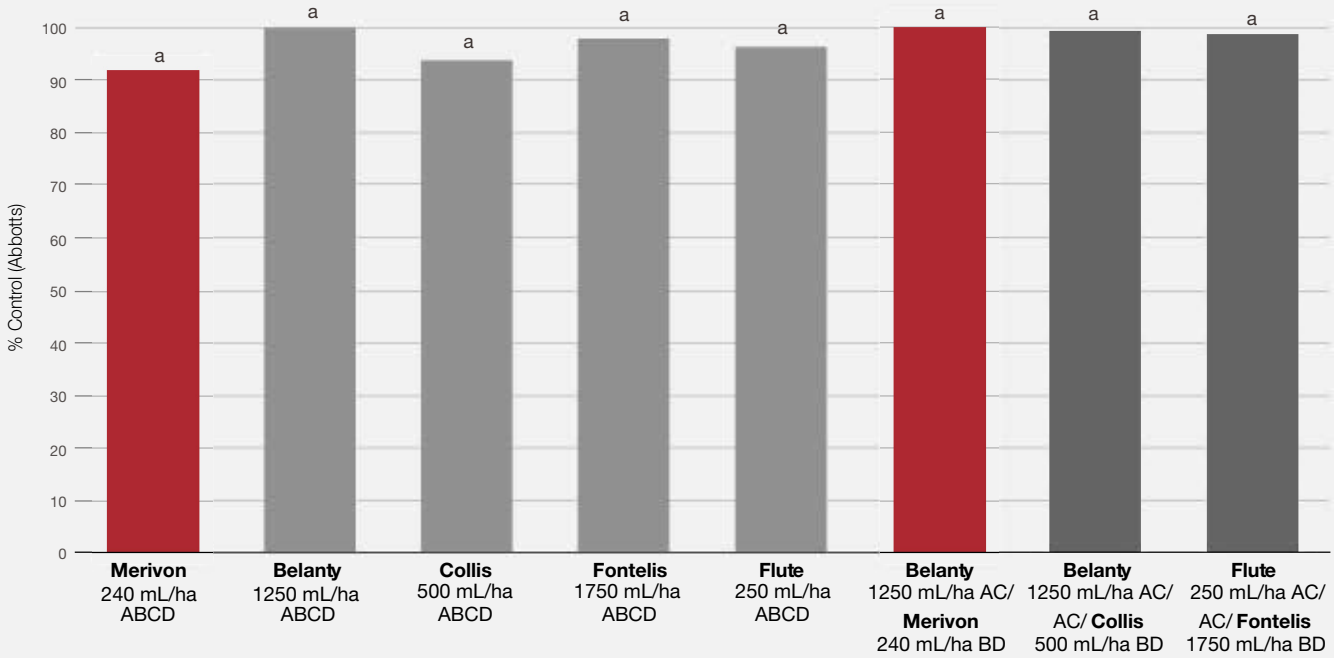
Maximum two consecutive sprays and three in total per season

Merivon for cucurbits (cont.)

Efficacy on Powdery mildew

Severity - cucumber and zucchini

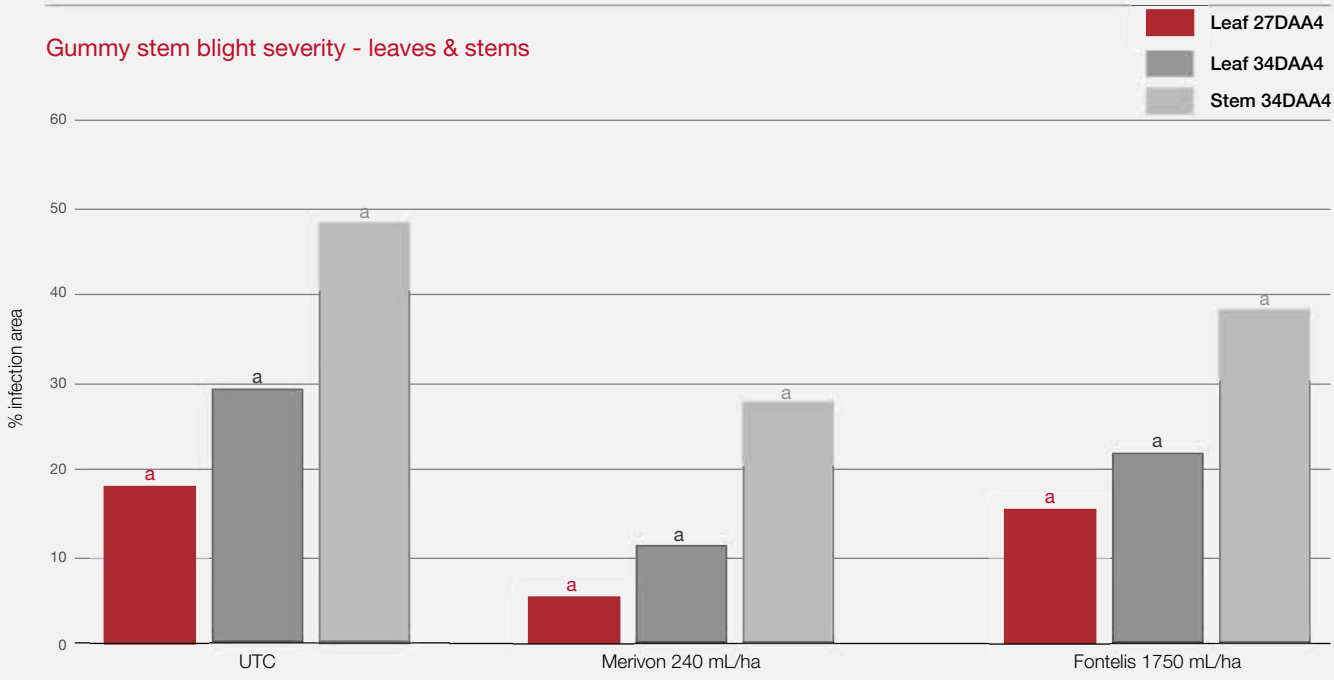
16-17DAA



Trials: DEV-F-2021-AU-216-A-01.0-AU-ASA-SA1, DEV-F-2021-AU-216-A-01.0-AU-ASQ-001, DEV-F-2021-AU-216-A-01.0-AU-ATA-001.
Average mean control from 3 trials in cucumbers and zucchini using 4 applications (ABCD).

Gummy stem blight in cucurbits (watermelons)

Gummy stem blight severity - leaves & stems

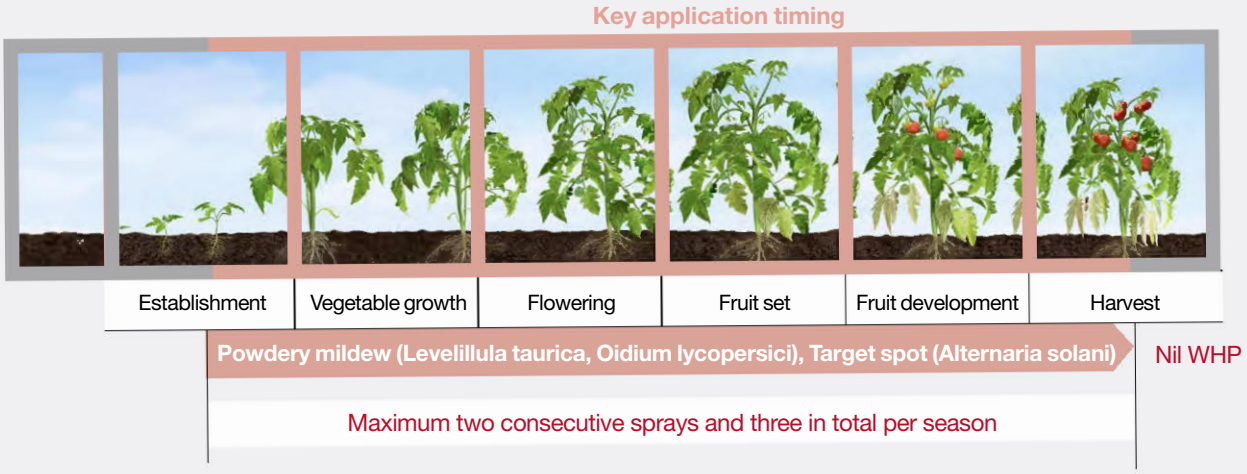


DEV-F-2020-AU-213-A-01.0-AU-ASN-493.
Billimari NSW. Watermelon cv Javelin and Nightshade.
4x applications at 300L/ha.

Merivon for fruiting vegetables

Application timing

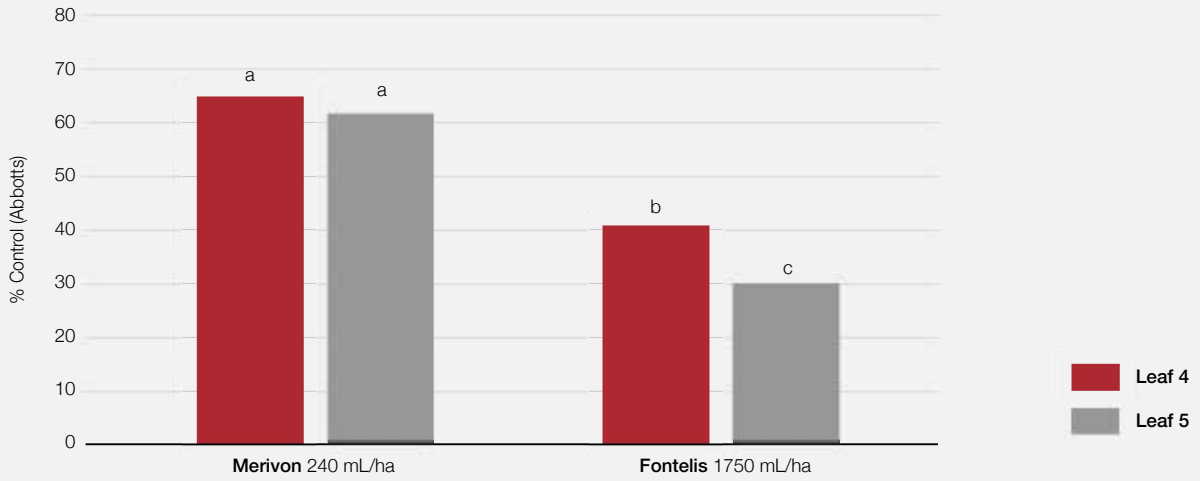
Apply Merivon preventatively with spray intervals of 7 to 14 days. Use the shorter interval if conditions favour disease development. Tank-mixing Merivon with a protectant fungicide such as Polyram is recommended.



Merivon for fruiting vegetables (cont.)

Efficacy on powdery mildew in tomatoes

Severity leaves

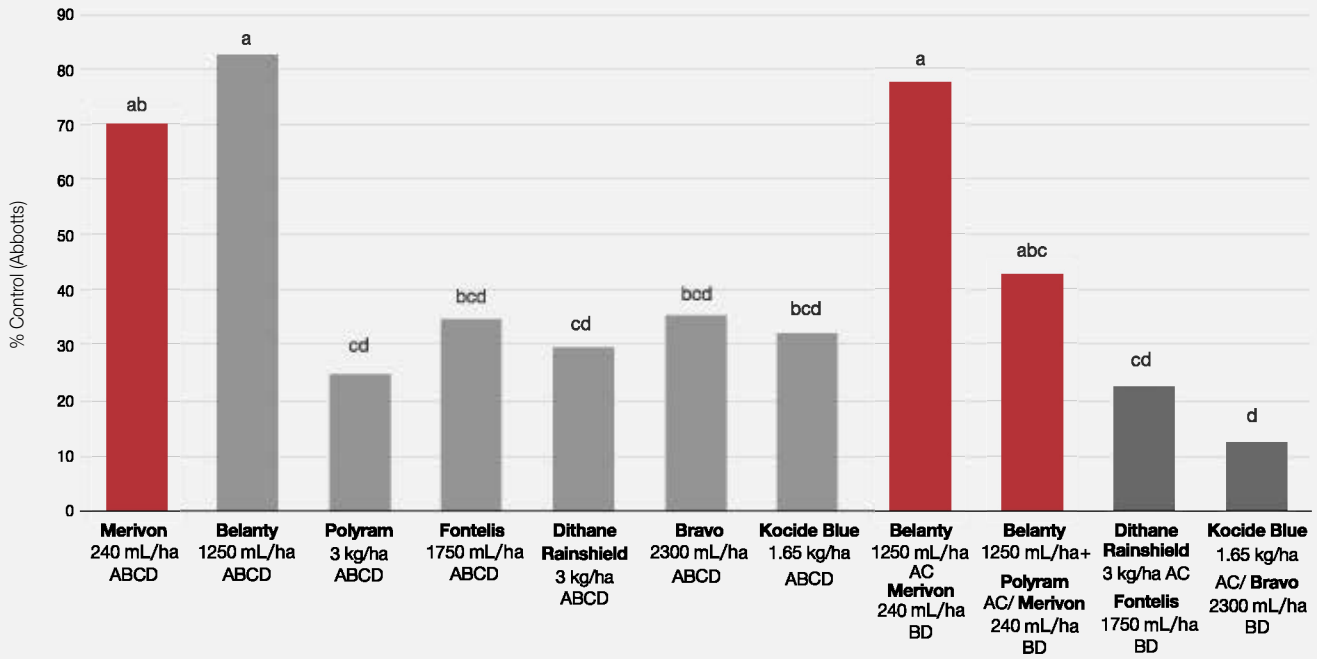


DEV-F-2020—AU-222-A-01.0-AU-ASQ-002
Bundaberg, Qld
Tomato cv Entice

Efficacy on target spot in capsicums

Severity capsicum

14DAA4



DEV-F-2021-AU-220-A-01.0-AU-ASQ-341
DEV-F-2021-AU-220-A-01.0-AU-ASQ-342
DEV-F-2021-AU-220-A-01.0-AU-ASQ-343
DEV-F-2021-AU-220-A-01.0-AU-ASQ-344
DEV-F-2021-AU-220-A-02.0-AU-ASQ-757
DEV-F-2021-AU-220-A-02.0-AU-AWN-770
Multi trial analysis. 6x trials. 4 applications.

Merivon®
Fungicide

Key Merivon advantages

- ✓ Class-leading control of key diseases in nut, fruit and vegetable crops
- ✓ Consistently strong performance powered by two modes of action
- ✓ Highly cost-effective and reliable when used in spray programs with Belanty
- ✓ A low residue profile and short withholding periods
- ✓ Wide and flexible application windows with good IPM fit
- ✓ Rapid uptake and excellent rainfastness

For more information on Merivon® Fungicide, visit **crop-solutions.basf.com.au** or contact your local BASF representative on **1800 558 399**

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