Fungicide Program for Grapevines
Cool/Wet Climates
Margaret River, Coonawarra, Yarra Valley, Mudgee/Orange, Hunter Valley and Stanthorpe
Phomopsis, Black Spot, Powdery and Downy Mildew, and Botrytis Rot Control

Resistance:
All uses comply with CropLife recommendations for fungicide resistance management.

Suggested total volumes for dilute spraying:
- Dormant........................................ 200L/ha
- Wooly bud to early flower............. 500L/ha
- Late flower to pre-bunch closure 750-1,000L/ha
- Bunch closure to vintage............. 1,000-1,500L/ha

Withholding Periods:
All suggestions comply with AWRI recommendations, provided the last Captan spray is at least 30 days before harvest and the last Corvette spray is at least 7 days before harvest.

1 Information on the IPM compatibility of Legend is not available.
2 Use Duplex instead of Liquicop if there has been an infection period for downy mildew and/or downy mildew infection is detected in the vineyard. Do not apply more than two consecutive sprays of Duplex.
Information on the IPM compatibility of Legend is not available. Use Duplex instead of Liquicop if there has been an infection period for downy mildew and/or downy mildew infection is detected in the vineyard. Do not apply more than two consecutive sprays of Duplex.

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Suggested total volumes for dilute spraying:
- Dormant.............................. 200L/ha
- Wooly bud to early flower.......... 500L/ha
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Spray Guidelines

The spray program for warm dry climates is designed to give you the best options for disease control throughout the season in districts such as Barossa, Riverland, Sunraysia, Murrumbidgee Irrigation Area (MIA), Hunter Valley and Inland Queensland grape growing regions. The spray program for cool wet climates is designed to give you the best options for disease control throughout the season in districts such as Margaret River, Coonawarra, Yarra Valley, Mudgee/Orange and Stanthorpe grape growing regions.

In both situations the number of sprays needed will vary with disease pressure and the diseases present. The programs provided are for conditions of high disease pressure. Important factors considered when preparing these programs are outlined below.

Strategic Coverage: The viticulture industry has become more focused on good phomopsis control, thanks to research over recent years, which has identified different strains with different pathogenicity, the importance of pruning methods and effective fungicides. The importance of early season control of this disease is supported by pre-budburst application of Emblem®. This is followed by applications of Dragon® and Captan are recommended in cool wet climates at the critical stages of 80% capfall, pre-bunch closure and pre harvest. Where Botrytis pressure is much lower or the stage of the crop/disease life cycle is less critical, the protectants Barrack® and Captan are recommended.

Mode of Action: To reduce the chance of fungicide resistance developing, a range of modes of action are recommended for control of diseases. Fungicides are also recommended at times of the disease life cycle where they will be most effective according to their mode of action.

For example, for powdery mildew control we recommend the protectant fungicide sulphur (Group M2) for early and late sprays. Before, during and after flowering, which are the critical periods for powdery mildew control, we recommend 1 spray of Flute® (Group U6), 2 sprays of Supernova® (Group 11), 1 DMI (Group 3) spray and 1 Legend® (Group 13) spray, so that (5) modes of action products are recommended for powdery mildew control.

Fungicide Resistance Management: The maximum number of sprays as recommended by CropLife is always adhered to so as to minimise the risk of the development of fungicide resistance. In some cases the number of sprays of a product in the program may be less than the recommended maximum, but never more. Relatively cheap and effective fungicide options such as DMI, copper and sulphur are included. However, reduced effectiveness of some DMI's has been reported and we have therefore restricted the number of DMI sprays to one, depending on climate, and introduced products from different modes of action for powdery mildew control. A maximum of 1 or 2 dicarboximides (depending on the total sprays for this disease) are recommended by CropLife for Botrytis control in vines. Therefore two applications of Corvette® are recommended in our programs.

Integrated Pest Management: The effect of fungicides on biological control agents such as predatory mites is carefully considered. Fungicides which are known to have an adverse affect are generally not included in the spray program unless there is no alternative product with a better IPM profile. Captan and Dragon control a wide spectrum of diseases (phomopsis cane and leaf blight, downy mildew and black spot) and at the same time have excellent IPM profiles. Some other protectant fungicides such as those based on mancozeb are known to have a damaging affect on a range of predatory mites which assist in the management of bud mite and rust mite in vines. We do not recommend them.

Withholding Period: Withholding requirements for export wines, as recommended by the Australian Wine Research Institute (AWRI) have been strictly adhered to. Although Barrack has a 7 day withholding period in Australian grapes, MRL's do not exist in some important overseas wine markets and therefore it is not recommended past 80% capfall as recommended by the AWRI.

Cost Effectiveness: Where there are 2 alternative products or product combinations that will fulfil a similar role, the one, which costs less, is recommended.

Several products are registered for protective and post infection control of downy mildew, but these are generally more expensive than straight protectants. We only recommend these products (e.g. Crop Care’s new Duplex®) where there has been a downy mildew infection and curative activity is required. Otherwise we recommend the protectant copper product Liquicop®.

Crop Effects: Where a large number of sprays of a product may have an adverse affect on vines or the environment, the total sprays are reduced (or sometimes eliminated) and another product with similar activity is recommended.

For example copper products used throughout the season will cause a bronzing of leaves of many varieties and may result in pollen sterility at flowering. We recommend our copper product Liquicop only after flowering and later in the season after earlier sprays of Dragon, Barrack and Captan.

For more information, please contact your local Technical Sales Representative.

Customer Service (Australia-wide):
1800 111 454
www.cropcare.com.au

1 Barrack, Dragon and Supernova are registered trademarks of Crop Care Australasia
2 Captan, Corvette, Duplex, Emblem, Flute, Legend, Liquicop and Protection 400 are registered trademarks