



Fungicide Resistance Management Strategies
Developed by the CropLife Australia Fungicide Resistance Management Review Group
 Valid as at 10 June 2016

Crop(s): **Grape**
Pest(s): **Downy Mildew**

Resistance Management Strategy for:

Group 4 (Phenylamide);
 Group 11 (Quinone outside Inhibitor);
 Group 40 (Carboxylic acid amide); and
 Group 45 (Quinone outside inhibitor, stigmatellin binding type) fungicides

1. Apply all these fungicides preventatively, **Group 4** fungicides should be applied before the first sign of oilspots or as soon as possible after an infection period.
2. Mixtures - co-formulations or tank mixes with label rate of alternative mode of action
3. Apply a maximum of two consecutive applications of any one group.
4. 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 vine growth.
5. Limit the use of **Group 4** fungicides to periods when conditions favour disease development. Always apply **Group 4** fungicides in mixtures.

	Group			
	4	11	40	45 (40)
Max. number of consecutive applications	2	none	2	2
Max. number of solo sprays	none	2	2 (50%)	none
Max. number of sprays per season	4-mix	2	4-mix (50%)	4-mix
Areas of higher agronomic risk	mix	mix	mix	mix

1. **Group 40 - DO NOT** apply as the last spray of the season.
Group 40 - apply a maximum of 50% of the total number of downy sprays
2. **Group 11** – If applied alone, do not make consecutive applications.
3. **Group 11** – apply a maximum of 2 sprays per season, including mixtures.

This strategy is a guide only and does not endorse particular 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 with the Australian regulator's (APVMA) product database for contemporary information on products and actives. The database can be sourced through www.apvma.gov.au. The information given in this strategy 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 this strategy is **valid as at 10 June 2016**. All previous versions of this strategy are now invalid.