

Crop(s) **Cucurbit**
Disease(s) **Downy mildew**

Resistance management strategy for:

Group 4	Phenylamides (PA);
Group 11	Quinone outside inhibitors (QoI);
Group 28 + 43	Carbamates + benzamides;
Group 40	Carboxylic acid amide (CAA);
Group 45 + 40	Quinone outside inhibitors, stigmatellin binding type (QoSI) + CAA;
Group 49	Oxysterol binding protein inhibitors (OSBPI); and
Group 49 + 11	OSBPI + QoI.

Guidelines

1. Applications made within the nursery count towards the total number of applications allowed per crop. It is recommended that disease control is started early and maintain a regular program using a fungicide from groups other than **Groups 4, 11, 28+43, 40, 45+40, 49 or 49+11**.
2. When conditions favour disease development, **do not** wait for disease to appear, but apply two consecutive sprays of a **Group 4, 11, 28+43, 45+40, 49 or 49+11** fungicide, at the interval recommended on the label, then resume the program of sprays using products from a different group to the fungicide just applied.
3. **Do not** apply more than four sprays of a **Group 4** or **Group 40** containing product per season.
4. **Do not** apply more than three sprays of a **Group 49** containing product. **Group 49** containing sprays should not consist of more than one in every three sprays of the total number of fungicide sprays per crop. **Group 49+11** sprays count as both a **Group 49** and a **Group 11** spray.
5. **Do not** apply more than two sprays of **Group 28+43, 45+40 or 11** containing fungicides (including **49+11**) per crop.
6. Apply **Group 4, 11, 45+40** and **49** (including **49+11**) fungicides preventatively.
7. Apply **Group 4** and **49** fungicides only in mixtures or co-formulations with a registered fungicide from a different mode of action group with no known resistance.
8. Continue alternation of fungicides between successive crops. **Do not** make more than (6) six total applications of a **Group 49** product per year on the same area targeting the same disease.

29

Please note:

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 made 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 Pesticides and Veterinary Medicines Authority's 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 liability for loss or damage suffered as a result of its application and use. Advice given in this strategy is valid as of 22 July 2026. All previous versions of this strategy are now invalid.



	Group				
	4	11	28 + 43	40, 45 + 40	49, 49 + 11
Maximum number of consecutive applications	2	1	2	2	2
Maximum number of solo sprays	None				None of 49
Maximum number of sprays per crop or season inc. Nursery*	4	2	2^	2 or 4	3^ (or 1 in 3) 6 per year

* Maximum application number on product label may differ. Ensure you follow the label recommendations.

^ Not allowed in nursery production.

Please note:

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 made 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 Pesticides and Veterinary Medicines Authority's 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 liability for loss or damage suffered as a result of its application and use. Advice given in this strategy is valid as of 22 July 2026. All previous versions of this strategy are now invalid.

