

**Crops(s)**            **Wheat**

**Disease(s)**        **Powdery mildew**

Resistance management strategy for:

<b>Group 3</b>	Demethylation inhibitors (DMI);
<b>Group 5*</b>	Amines ("morpholines")
<b>Group 7</b>	Succinate dehydrogenase inhibitors (SDHI);
<b>Group 7+3</b>	SDHI + DMI;
<b>Group 11+3</b>	Quinone outside inhibitors (QoI) + DMI;
<b>Group 11+4</b>	QoI + phenylamides (PA);
<b>Group 11+7+3</b>	QoI + SDHI + DMI;
<b>Group 13*</b>	Azaphthalene;
<b>Group 21</b>	Qil - fungicides (quinone inside inhibitors)
<b>Group 50</b>	Actin disruption aryl-phenyl-ketones; and
<b>Group U6</b>	Unknown phenyl-acetamide

\* Currently only available under temporary permit. Always check that permits are valid prior to use

## Guidelines:

1. Fungicides should be used as protectant treatments prior to symptoms of disease when conditions are conducive to disease development.
2. In high-risk disease environments integrated management approaches should be used to reduce fungicide resistance risk, which may include:
  - a. Removal or burning of stubble;
  - b. Crop rotation (**avoid** wheat on wheat);
  - c. Control of green bridge volunteers; and
  - d. Use of tolerant and/or resistant varieties.
  - e. Strategic use (timing and application technique) of fungicides
3. **Do not** apply more than two applications per growing season of **Group 5, 7, 11, 13, 21, 50** and **U6** containing products. This includes in-furrow or seed treatments that have activity on powdery mildew. Combinations of in-furrow and seed treatment are counted as one application.

### Please note:

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4. **Do not** apply consecutive applications of **Group 11** containing products. This includes in-furrow i.e. if a **Group 11+4** fungicide has been used in-furrow at planting, the first foliar fungicide spray must not contain a **Group 11** fungicide.
5. If a **Group 7** seed treatment has been used that has foliar activity (as determined by label claims), the first foliar fungicide applied should not contain a **Group 7** fungicide.
6. **Do not** apply more than one application of a **Group 7** seed treatment that has foliar activity in any two consecutive growing seasons.
7. If a **Group 7** or **11** fungicide is being applied as a foliar spray, it must be co-formulated or mixed with a registered product with a different mode of action, with no known resistance in the local area.
8. **Do not** apply more than three applications containing **Group 3** fungicides per growing season. This total of three applications includes DMIs applied as **Group 11+3** or **Group 11+7+3** co-formulations and in-furrow or seed treatments that have activity on foliar disease. Combinations of in-furrow and seed treatment are counted as one application.
9. **Do not** apply **Group 5, 13, 21, 50** and **U6** fungicides onto existing infections of powdery mildew. Always use preventatively. If applying consecutive applications, use an effective mixing partner.
10. Reduced rates, including multiple applications must not be used. Always use label rates.

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