

Important steps to control powdery mildew

Vineyard
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Weather conditions in spring last year brought about exceptional powdery mildew pressure. For the unprepared, it caused significant outbreaks and these areas could well go on to ignite a problem for the coming season.

The foundation for powdery mildew control really is built upon having a good understanding of the disease. Powdery mildew doesn't need rainfall but it does thrive on humidity. Relative humidity above 40 per cent provides conditions suitable for spore germination. Sheltered parts of the vineyard where air doesn't circulate freely and shaded parts of the canopy provide conditions that suit initiation and development of this disease.

Powdery mildew doesn't need to be obvious to become problematic very quickly. Be sure to start monitoring early, check those sheltered parts of the vineyard and inspect those shaded parts inside the canopy. Early detection combined with a good understanding of each vineyard block's disease history and risk profile will shape your control strategy.

Powdery mildew control has what I call the three big T's:

- Type
- Timing
- Technique

They all form the basis of a reliable control program.

Type and Timing

When it comes to fungicidal control there are plenty of options to choose from. Exceptional control comes when growers realise the importance of using robust chemistry early in the season. After about 40 days from budburst, spore numbers increase dramatically. Disease severity escalates if early control measures are not applied or are ineffective. The 2017 vintage demonstrated just how beneficial a robust fungicide before flowering can be.

Remember, not all DMI fungicides show the same efficacy. Penconazole, the active ingredient in TOPAS, is known to have a higher intrinsic level of control against powdery mildew than many other DMI products. Field failure at label rates of TOPAS are rarely seen.

Growers with an overreliance on sulphur are likely to be disappointed when they inspect their canopies and berries in January.

Technique

Using the correct water volume is so critical for good disease control. Last month I discussed this at some length. Hopefully this message resonated with growers and they will adjust water volumes to match the canopy size and density through the coming season.

Cultural techniques like managing the canopy to ensure good ventilation will assist with control, especially in high yielding large canopies, which encourage high humidity levels.

Lastly, remember to rotate your fungicide groups in line with Crop Life Resistance Management guidelines.