

Managing vineyards after wet conditions

Vineyard
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Winter and spring rainfall was above average in many grapegrowing regions last year. This has been positive for soil moisture levels, but has posed some problems with access to vineyard blocks and interruption of early season sprays. In such cases there is a risk that fungal diseases like powdery and downy mildew will take hold and become more difficult to control once normal spraying resumes. In a season like this, there are a number of factors to consider when getting into the vineyard to conduct spray applications.

Things to consider

- As soil temperatures increase, growers can anticipate vigorous early season growth due to high soil water content. More spray applications and/or different fungicides are likely to be required, especially during the early part of the season.
- It's important to ensure access to an adequate stock of fungicide, especially curative downy mildew treatments, in the event wet weather continues.
- Higher than usual disease pressure caused by missed sprays and vigorous growth increases resistance pressure. It is essential to use fungicides from different groups to avoid fungicide resistance. Refer to the new CropLife resistance management strategies in the 'Dog book' or the CropLife website for more information.
- The wet soil profile will stimulate midrow and undervine growth. Maintaining some of this growth will draw water from the soil profile, reduce vine vigour and help maintain soil structure under traffic. That said, excessively vigorous undervine growth will increase humidity and restrict airflow, which are important contributors to disease pressure.
- In high disease pressure situations it's important to take extra care with spraying and not cut

any corners. Ensure that equipment is correctly calibrated and that spray coverage is complete.

Getting access to wet vineyards

- The temptation to spray as soon as possible will be high, but safety should not be forgotten. Tractors and sprayers are more unstable on wet soils and adjustments should be made to minimise risks to personnel and equipment.
- Soil compaction can be a significant issue when traffic resumes after wet weather. To minimise damage to soil structure, allow surface water to drain and ground to become firm before attempting any tractor passes. If possible, part-fill spray carts to reduce weight and minimise soil compaction.
- For smaller areas, spray application via an all-terrain vehicle or knapsack sprayer may be the only option to access the block.
- Aerial spraying may be a practical alternative in some situations. Growers need to ensure the product is registered for aerial application (refer to label) and neighbours are notified (as per state legislation). Growers should also consider the effectiveness of coverage and risk of off-target drift from aerial applications.

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Tags:

Viticulture

powdery mildew