

Vine Talk: what you should know about vine health during post-harvest

Vineyard
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Vine Talk with Dave Antrobus

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The post-harvest period is an ideal opportunity to safeguard or re-establish vine health leading up to leaf fall. It's important to ensure vines go into dormancy with sufficient carbohydrate and mineral reserves to support next season's early growth, from budburst through to flowering. After flowering, the vine generally has enough leaf area to start supporting its needs.

Ideally, leaves should remain healthy, hydrated and functional from harvest to leaf drop.

Nutrition leading into dormancy is important. As an example, the typical proportions of total seasonal mineral nutrient taken up by grapevines in the post-harvest in the Riverina period is about 30 per cent for nitrogen and phosphorus, 20 per cent for magnesium and calcium, and 15 per cent for potassium. Post-harvest period vine nutrition goes hand in hand with irrigation and water stress will reduce the plants ability to take up nutrients, so keep an eye on soil moisture and irrigate when appropriate.

I'm often asked about post-harvest application of fungicides, in particular, for Powdery Mildew control. The Riverina, with its relatively long time interval between harvest and leaf fall, is a good example of an area where Powdery Mildew can build-up. Generally, Powdery Mildew infects young leaves, so for post-harvest carbohydrate and mineral nutrient restoration (which relies largely on the functionality of

mature leaves) late Powdery Mildew infection is often of little consequence. This is not a hard and fast rule though. If disease pressure is high and you are in doubt of what to do, you should always consult your local adviser.

The aim of a late Powdery Mildew spray may be to reduce the number of overwintering spore-forming structures to a low level for next season. If the incidence of Powdery Mildew is particularly high, and fungicides other than sulphur forms are being considered, the use of single-site mode of action fungicides should be avoided, to reduce the potential for the development of fungicide resistance. Again, your local advisor will be able to advise you on the best options.

Young grapevines can be greatly impacted by Powdery Mildew if control of this disease is not maintained during the post-harvest period. Powdery Mildew infection in young vines can significantly impact on the accumulation of carbohydrates and minerals and cause the vines to fail to 'harden-off' - making them more susceptible to winter chill. It is also important to prevent Powdery Mildew from establishing in the buds of young grapevines and creating a recurring problem for seasons to come, associated with self-infecting 'flag' shoots. Maintaining low levels of the disease in young grapevines will minimise the potential for this disease from establishing in the first place.

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