GrowCare Barossa

Brought to you by the Barossa Grape & Wine Association

This message was posted on **Thursday 9th January 2014** and will be updated as necessary for best management of vineyard issues.

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Season so far

- Most vines are now approaching berry softening and some of the reds are beginning to change colour - that is, they are rapidly approaching veraison (EL 34-35).
- The conditions in the middle part of this season have generally been mild and excellent for grapegrowing. A little rain here and there has been marginal for downy mildew which has not developed as it might have if rains were of longer duration.
- At times, mild and cloudy weather has suited the spread of powdery especially in varieties and vineyards with bigger (ie. shaded) canopies. Also, the windy weather in spring made it difficult to maintain an effective spray cover in early-season when it was needed.
- While vineyards in some other regions are finding higher levels of powdery than appeared at the same time last season, only low levels have been reported so far in the Barossa region.

Forecast Heat Wave!

- The Bureau of Meteorology is trialling a new **heatwave forecast service** to alert to the onset of extreme heat events. This service complements the Bureau's existing maximum and minimum 7-day temperature forecasts. In launching the service, the B of Met said the service will provide a heatwave intensity index as a measure of the build-up of 'excess heat' giving a better indicator than temperature alone in anticipating the impact of heat stress.
- The service is monitoring the build up of heat over a period of time, taking into account the long-term climate of a location and the maximum and minimum temperatures leading up to a heatwave event.
- When average conditions are exceeded by continuously high night-time and day-time temperatures, extreme heatwaves pose significant risks to people and to vine crops. The new service will indicate periods of 'low', 'severe' and 'extreme' heatwave conditions.
- Note that the definitions of heatwave severity are based mostly on the risk to the health of 'vulnerable people' rather than plants. It is only the forecast 'extreme heatwave' and possibly the 'severe' events that are likely to affect grapevines. This new service has the potential to help grapegrowers be better informed.
- **The pilot service is forecasting a 'severe heatwave event' in the Barossa region for the three days from 12 January.**
- **For further information, have a look at: http://www.bom.gov.au/australia/heatwave/, then read the text under: 'About Pilot Heatwave Forecast'**

Irrigation top-up?

- Given the expected hot weather in the next week, now is an especially good time to check soil moisture levels to determine if an irrigation top up is needed.

Powdery Mildew

- It is now late in the spray-season for the early harvested varieties. Berries are resistant to powdery from 3-4 weeks after flowering though bunch stalks remain susceptible and leaves gradually develop some tolerance.
- It is critical to monitor your vineyard for powdery mildew at this time of the year. If more than minor levels of active powdery are found in your vineyard, consult your winery before spraying.
- Look for the grey-white powdery growth on yellow spots on leaves and particularly for white powdery growth on shaded bunches within dense canopies.
- Especially check late-harvested vines to be sure powdery does not 'suddenly appear'. Also note that for most if not all varieties, withholding periods are already operative. If you plan to spray, check if the canopy needs trimming beforehand to assist effective spray coverage.
- Fungicides such as sulphur with its fumigant activity will help its effectiveness in hard-to-spray canopies. If using sulphur, apply with the highest dilute rate (600g/100L), with best sprayer setup and a water volume to 'drench' the canopy. Consider spraying on a calm late afternoon or evening after a hot day to assist its fumigant activity.
- Note: vines under water stress and vines sprayed in hot weather (>32°C) with high relative humidity (>70% RH) are the most at risk from sulphur burn.
- Other fungicides such as the DMI's are at risk of the development of resistance, so if using these be sure to follow anti-resistance management strategies.

Botrytis and Bunch Rots

- The relatively dry conditions of recent weeks and the low occurrence of LBAM this season means the risk of Botrytis and other bunch rots to date, is low.

This message has been prepared by the Barossa Grape & Wine Association in partnership with Magarey Plant Pathology and Western Electronic Design. It will be updated as soon as possible after the next significant vineyard event.
