GrowCare Barossa

Brought to you by your local Regional association

This message was posted **by 5 pm Monday 24th November 2014** and will be updated as necessary for best management of vineyard issues.

2014/15 V2 # 3

Table 1. Recent Rainfalls at GrowCare Barossa Weather Station Sites

AWS Site	Nov 15th		Nov 20th		Nov 22nd	
	Rainfall	Leafwetness	Rainfall	Leafwetness	Rainfall	Leafwetness
Craneford	10.3mm	17hr	9.3mm	9hr	12.8mm	13hr
Lyndoch	4.9mm	18hr	10mm	18hr	13.7mm	9hr
Gomersal	5.1mm	16hr	9.7mm	7hr	15.5mm	7hr
Ebeneezer	3.8mm	16hr	7.2mm	21hr	2.5mm	2hr

Recent Rainfalls.

- The GrowCare weather stations recorded variable falls across the district (see Table 1 above). This is typical of rains from thunderstorm rather than frontal weather activity.
- At Craneford on Saturday 22nd, the rainfall coincided with a period of overnight dew to give a moderate length of leafwetness. There was also a short period of rain this morning (24th November) when 2mm was recorded. This followed relatively short rainfalls recently (on 15th and 20th November) with varying periods of leaf and canopy wetness.
- On 15th and 20th November at Lyndoch, there were similar rainfalls but they induced longer periods of leafwetness. Last Saturday (22nd Nov) the rain induced a short period of leafwetness.
- At Gomersal, the morning rainfall on Saturday 22nd was associated with relatively low humidity and a short period of leafwetness interrupted by dry spells. This followed rains on 15th and 20th November. The rain event on 20th induced a relatively short periods of leafwetness.
- The rains at Ebeneezer last Saturday produced only 2.5mm on a canopy that remained wet for only 2 hr. This followed the earlier rains that induced moderate and long periods of leafwetness on 15th and 20th November respectively.

Bunch Rots and Downy Mildew

- Until recently, the weather has been dry and not favourable for bunch rots or downy. As berries set they develop a moderate level of resistance to bunch rots (until sugar levels increase at veraison). Once they reach pea-size (7mm at EL 31) they become resistant to downy infection.
- The duration of these falls was too short for the development of downy mildew primary or secondary infection. However the conditions were favourable for Botrytis bunch rot infection at the four AWS sites, especially from the rains of 15th November.
- While generally, at times, the extended period of adequate temperature, high relative humidity and leafwetness might have caused concerns for bunch rots, most berries were **not** susceptible to infection at this time.
- Most varieties were through flowering at the time of the rain events and the young berries had gained a level of resistance to bunch rots.
- However, **if** a late-flowering variety was still progressing through capfall **and** the vines were <u>not</u> protected by a suitable fungicide spray, there was/is risk of bunch infection from the rains on or near 15th November. [The berries were resistant to infection during the more recent rains.]
- As a result, several management scenarios exist:
  1. **Vines resistant:** If your vines had passed through flowering before the rainfall of 15th November, the present risk of infection from bunch rot fungi is very low. No immediate action is needed.
  2. **Vines were susceptible but protected:** If your vines 1) were progressing through flowering by 15th November, <u>and</u> 2) were covered by a suitable protective spray such as chlorothalonil shortly <u>before</u> the rain event, there is little or no risk of infection and no further spray for bunch rot is needed at present.

3. **Vines were susceptible but not protected:** If your vines 1) were progressing through flowering by 15th November, and 2) were not adequately protected by a fungicide spray shortly before the rain event, OR you are in doubt about the above options, you may consider applying a suitable botryticide spray. **However,** it is effectively too late to kill off the infection (if it occurred) and the array of fungicides you can use at this time of the season is limited by withholding periods.

- **Also**, at this time, there is little value spraying for bunch rot if the weather remains dry. Sprays like iprodione are effective only if further wet weather favours additional infection events.... and the forecast in the immediate future is for warm, dry conditions.
- If needed, consult your winery to determine any fungicide sprays to control bunch rot. An increasing number of products are not to be used past berries pea-size (EL 31) and others are restricted in the number of applications permitted during the season.
- Plan to 'keep' a Botrytis fungicide should a further application be needed later in the season.
- If proceeding with a spray application, choose a fungicide with some 'kick back' activity against Botrytis and apply the spray as soon as possible ie. within the next 3-5 days. Note: A preventative/protective spray at this time will not control any infection that may have occurred in the wet conditions initiated last Saturday.
- So, given the low risk of the most recent weather favouring disease, if the rain fell on your vineyard over the last few days, it will have given a welcome replenishment of soil moisture.

Powdery Mildew

- A week or two ago, GrowCare monitors found powdery mildew escalating in an unsprayed vineyard in a warmer region than the Barossa. Now, they have detected low levels of powdery in sprayed vineyards!
- These reports serve as a useful 'early warning system' for us in the Barossa!
- From early-season in unprotected vineyards, powdery spreads within foci of infection around the sites of the flagshoots. This occurs for the first 4-5 weeks before the disease 'breaks out' from these centres of infection.
- By weeks 10 – 12, that is about now in an unprotected vineyard, powdery increases in severity as the spore load builds.

Monitoring your vineyard

- It is timely to have a thorough look in your vineyard canopies for powdery mildew. Look for the typical small, whitish blotches on either the top and/or lower surfaces of leaves. These will be easiest to find within the most shaded parts of the canopy.
- Photos of symptoms and notes on monitoring for powdery mildew, are located at: http://www.winetitles.com/diagnosis/details.asp?view=33
- While most vineyards are reaching a high level of resistance in the berries, it is critical to ensure vineyard levels of powdery remain low for the next few weeks.
- If the disease is present, it means that there is some deficiency in one or more aspects of your disease management approach. Check your treatment, timing and technique. The most frequent failure is in the effectiveness of achieving good spray coverage.
- It is important to find out what, if anything is wrong. Make any needed corrections now while it is still possible to achieve effective control.
- If using sulphur, apply at the highest recommended rates (600 g/100L) in a high volume of water to ensure the best spray coverage and maximum control of powdery mildew within the dense canopies.

LBAM

- LBAM is at risk of being present at high levels in some patches. Monitor vineyards now, looking for LBAM crawlers. Use the table below to determine if a spray is needed.

Monitoring for LBAM

LBAM lifecycle stage	How to monitor	When to monitor	Common threshold*
Egg masses	Inspect the upper side of expanded leaves on 100 shoots	Once first leaves have expanded and then through the season	>3 viable egg masses per 100 shoots
Larvae on shoots	Inspect shoot tips and leaves webbed together on 100 shoots	Throughout the season	>20 larvae on foliage per 100 shoots
Larvae in bunches	Inspect inflorescences and bunches on 100 shoots	From inflorescence development onwards	>10 larvae within bunches per 100 shoots

- Source: Andrew Weeks and Nicole Pitman, 'Lightbrown Apple Moth', Fact Sheet No. 4, CCW, Berri, SA.

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

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