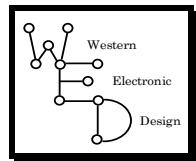# *GrowCare Clare*

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This message was posted on **Thursday** 28th **February 2013** by 6pm.

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Recent Rains

- **The rain event that began yesterday morning (Thursday 27th Feb.) has led to some risk of bunch rots but the risk is generally low.**
- After a long period with only minor amounts of rainfall, the weather system that moved through yesterday brought falls of the order of 15-20mm across the region. The rain started at around 10am and continued until the early hours of this morning.
- About one hour after the rain began, the relative humidity (which gives a measure of the moisture content of the atmosphere) reached 90% or more. The moist atmosphere persisted for varying times dependent on the locality of the vineyard, the density of the canopy and other factors such as vineyard aspect and slope.
- On average, it seems that the high level continued until about 5am when the winds picked up. As expected, further drying occurred after sunrise.
- The period of high humidity was sufficiently long to be worth investigating its potential for Botrytis and similar fungal pathogens, but only in relation to the fruit still on the vines. That is because the foliage, at this late stage of the season, has gained a reasonable level of resistance.

Conditions for Bunch Rots

- For bunch rots to occur, the fungi require about 15-20 hours of wetness at temperatures around 15-20°C (the '15-20 rule' of thumb!). In cooler conditions, longer periods of wetness are needed. At temperatures ranging from 19°C down to 13°C as occurred, a longer duration of wetness is needed.
- By several reports, most canopies were dry by sunrise but the fruit retained a little moisture beyond that time. Given the conditions last night, about 18-20hr wetness occurred within bunches. So, give or take an hour or two, the conditions were at best, marginal for bunch rots. In addition, the winds since the early hours have been drying the fruit quite rapidly.
- Some berry splitting has been observed, for instance in ripe bunches of Riesling. It is the split berries that have the greatest risk of bunch rots developing because the fungi grow on the sugars within or leaking from the splits. And this is of greatest risk if there was some level of bunch rots (eg Botrytis)

already present in the canopy. This will have provided some inoculum (spores) that may trigger an increase in bunch rot in these vineyards.

Risk of Disease

- The relatively dry weather to date this season however, means that in most vineyards, the level of spores is low. Many will have died out in the hot, dry conditions. Low levels of spores with marginal conditions for bunch rots means that the risk of disease developing last night was generally low.
- If infection were to have occurred in your vineyard, the risk will be controlled by three main factors:
  o The tightness of the bunches and the thinness of the skin and their risk of splitting ie their susceptibility to the bunch rot fungi;
  o The time from now to harvest; and
  o The weather conditions during that time.
- Current weather forecasts indicate periods of moderate winds over the next few days and importantly, dry conditions. This suggests that the coming risk of disease is very low.

Action from Here

- There is little action needed in most vineyards given the low risk of bunch rots; however,
- It would be wise to check unharvested patches for split berries from last night's weather;
- If berries have split, there are few products of any value in a possible spray program and nearly all of these are no longer available for use so close to harvest;
- In this case, ask your winery for advice and enquire especially if the grapes can be picked as soon as possible.

Other Diseases

- The duration of wetness and the previous dry weather means that the risk of downy mildew or other diseases in effectively nil!

This message was prepared for
The Clare Region Grape Growers Association by
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