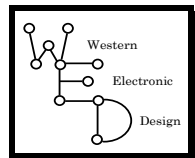




MAGAREY PLANT PATHOLOGY



# GrowCare Clare

Brought to you by your local Regional association



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## Season 2011/12

- **Budburst is continuing!** With the variable cool and mild weather, then recently warmer conditions, shoot growth has been variable this season. It varies between patches and localities. For instance, shoots on early varieties like Chardonnay vary from 30-40cm (EL15-17) whereas shoots on Riesling are around 30cm (EL13-17). In some vineyards, a few late varieties, especially some Cabernet Sauvignon, are well behind this.
- The season continues relatively dry and mild though some scattered rain is currently forecast in the next week.

## Downy Mildew

- **The rains from Tues. 4<sup>th</sup> to Fri. 7<sup>th</sup> October.** As indicated in the previous message, these rains brought conditions marginal for downy mildew primary infection. The data from the weather stations (AWS) at Auburn and Seven Hill East had suggested a (very) low risk of primary infection, while the data (now accessed) from the Clare North (Stanley Flat) AWS suggested a higher risk of primary infection at that time.
- **At the Clare North AWS,** there was a massive period of some 70 hours of constant leafwetness from 4<sup>th</sup> to 7<sup>th</sup> October while temperatures ranged from 11 to 14°C. Despite this adequate temperature and wetness for downy, there was little rain to splash spores to the canopy 16hrs after soil wetness began. However, none-the-less, in some vineyards across the wider district, especially where shoot growth began earlier, there was a low risk that downy mildew infection occurred.
- **As a result,** in 'at risk' vineyards, that were unprotected prior to the rains on 4<sup>th</sup> to 7<sup>th</sup> October, downy mildew infection may have occurred. If so, **oilspots are likely to be appearing from earlier this week (from 16<sup>th</sup> to 17<sup>th</sup> October).** If this occurred in your vineyard, look in the canopy for single or small clusters of yellow 'oily' spots on lower leaves of shoots. Look on leaves present at the time of the rains ie present prior to 4<sup>th</sup> to 7<sup>th</sup> October.
- **Young oilspots of downy mildew** usually show a slight chocolate halo. Oilspots from primary infection are few in number and are usually difficult to find inside the developing canopy. If needed, use the 'downy mildew bag test' to confirm the presence of the disease on suspect yellow spots.
- **The rains from Fri. 14<sup>th</sup> to Sat. 15<sup>th</sup> October** brought variable falls: from Clare North (7mm), Auburn (10mm), to Seven Hill East (14mm). GrowCare review of the data suggests the rain brought periods of leafwetness broken by periods of lower relative humidity - conditions **not** likely to have favoured primary infection. And, because any oilspots that developed from the rainfalls of 4<sup>th</sup> to 7<sup>th</sup> October were not expected until earlier this week, there was little, if any risk of secondary infection at that time.



*Young oilspots like these may show in vineyards of early bursting varieties unprotected against downy mildew prior to the rains of 4<sup>th</sup> to 7<sup>th</sup> October. However, primary infection usually only shows one oilspot per leaf on a small cluster of leaves 50-100 metres along the vine row. Note the faint, chocolate halo around these oilspots. (Photo. PA Magarey).*

- **The variable and at times, windy weather** has, to date, made spraying difficult. As a result, some vineyards were unprotected prior to the rains in early October. If this is the case, monitor vines carefully for oilspots.
  - **Rainfall forecast - Thurs. 20<sup>th</sup> to Sun. 23<sup>rd</sup> October.** These events are likely to be variable and bring further scattered rainfalls not likely to favour downy mildew primary infection. However, there is a small risk that secondary infection will occur if fresh oilspots are present in unprotected vineyards.
  - **Some growers have applied** a post-infection spray such as Ridomil (metalaxyl) to early varieties not protected prior to the rains of 4 to 7<sup>th</sup> October. If in doubt about the protection of your canopy, apply a pre-infection fungicide such as copper or mancozeb, as **soon as possible before** the next rain event. However, in most vineyards, there is very little or no risk of downy mildew to date.
- Note**
- **Downy mildew cannot** spread in secondary infection until oilspots appear in the canopy. If they develop, watch for warm humid nights with leaves wet in the morning. These conditions favour secondary infection. Monitor weather forecasts to be alerted to the possibility of a secondary infection event and if possible, apply a protective fungicide just before the wet conditions occur.

## Powdery Mildew

- **As in the previous message**, the recent weather conditions have continued to suit powdery mildew. Powdery grows best at 20-28°C. Spores develop 2–3 times more in number when the relative humidity is high (RH >40%).
- In unprotected canopies, the disease will now be spreading from ‘**flag shoots**’. The first 40 days from budburst are critical - the success of your control actions now will determine the success of control of next season’s inoculum and have a major influence on the disease levels at vintage.
- **Good control requires good spray coverage.** Take time to ensure that your sprayer is well calibrated. This will give you the opportunity to achieve good disease control. Without it, you are unlikely to succeed with powdery.
- **Any of the registered powdery mildew fungicides** are effective though sulphur at 600gm/100L in enough water to ensure good spray coverage will help control mites and it is a low-cost option.
- **Know your ‘enemy’:** Be familiar with powdery mildew symptoms. Look carefully inside developing canopies for the irregular-shaped, yellow blotches of powdery. These may occur on the upper and lower surfaces of the leaves. Look also for the ash-gray-white spores that grow on the blotches.
- **Inside/outside.** It is much easier to control powdery mildew by sprays applied now, rather than later. Spray coverage is much easier when applying fungicides to the outside of the canopy. So, apply sprays now **before the ‘outside becomes inside’**, ie before the leaves exposed on the outside of the canopy now, are covered by the foliage that will develop in the next 2-3 weeks. Spores that have spread from flagshoots to infect new and rapidly expanding leaves will, if unchecked, cause disease that will soon be shaded by new foliage. This will create a more humid atmosphere in a canopy less exposed to passing spray machinery!
- **Control of powdery mildew on the foliage** early in the season lays a sound basis for more successful control of the disease on fruit as it develops later.



*Young leaf spots caused by powdery mildew. **Top photo** shows irregular yellow blotches on the upper sides of leaves. These contrast with the round oilspots caused by downy mildew. **Bottom photo** shows the grey-white spores on the upper surface of powdery mildew spots when angled into the light. This contrasts with downy which shows the white down only on the undersides of oilspots. (Photos. PA Magarey and RW Emmett, DPI Vic).*

### GrowCare Clare 2011/12

If you know others who might like to receive GC Clare for this season, please pass this message on.

Ask them to advise CRWGA.

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*This message was prepared for  
The Clare Region Grape Growers Association by  
Magarey Plant Pathology and Western Electronic Design.*  
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