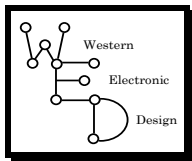




MAGAREY PLANT PATHOLOGY

GrowCare Clare

Brought to you by your local Regional association



This message was posted on **Thursday 4th November 2010** at 9am.
It will be updated as necessary for best management of downy mildew.

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Welcome to GrowCare Clare!

GrowCare Clare is a new 'free-to-air' e-mail service to keep you up-to-date with the best-management options for the diseases downy and powdery mildew.

This service is brought to you by your Clare Region Winegrape Growers Association. It will be sent fortnightly unless otherwise required and, as needed, will include options for the management of other diseases and pests, details of vineyard cultural operations, and Regional news.

The service is provided in partnership with Magarey Plant Pathology and Western Electronic Design who have been providing a similar service for grapegrowers of the Riverland.

It is planned to purchase three South Australian-made **Model T MetStations** (weather stations - AWS) for different localities in the Region. These will record rainfall, temperature, relative humidity and leaf wetness at 10 minute intervals. The data are needed to assess the risk of downy on a daily basis and will be sent to the GrowCare website where they will be expressed both in tables and easily read graphs. From there, it is planned to process the data for risk of downy mildew infection and provide advice about the disease in vineyards of the Region.

Options for managing powdery mildew will be provided at the same time. We will share more details of this later, once the weather stations are in place and the service is more fully operative.

Downy Mildew

Meanwhile, in piloting the introduction of the service, GrowCare has manually processed weather data from AWS in the Region - in Clare North and Clare South. The data were assessed and the following table was prepared. It shows the risk of the different steps in downy mildew primary infection in the vineyards next to the two AWS.

The data showed that, at both sites, despite the rain and moderate temperatures, **there was little or no risk of downy mildew in the wet conditions of last week** (Friday 29th – Sunday 31st October).

If your conditions differed from these sites, carefully check your vineyard for typical, yellow downy oilspots. **If** your vines were unprotected just prior to the rain **and** you find no spots, be sure to apply a cover spray as close as possible before the next suitably warm, wet rain event, **OR** if you find oilspots with white down on the undersides, apply a post-infection spray eg Ridomil, before Saturday 6th November.

For access to a simple, coloured fact sheet on the symptoms and conditions for downy mildew, click on: <http://www.gwrdc.com.au/webdata/resources/files/DownyMildewFactShee.pdf>

This message has been prepared by Clare Region Grape Growers Association, Magarey Plant Pathology and Western Electronic Design. It will be updated as soon as possible after the next rain event.

GrowCare Clare Weather Stations: Fri 29th - Sun 31st October 2010 - Primary Infection

District	Total Rain (mm)	Rain sufficient to wet soil & T>8C to begin germinating oospores [If dry soil - 5 mm rain; If wet soil - 3 mm rain]	Soil-wet 16 hrs & T>8C to germinate oospores... and release zoospores [Soil wet for 16hrs]	Soil wet & >8C for zoospores to survive until rain to splash to leaves. [Soil must not dry for ≥ 3 hr]	Rainfall & T>8C for zoospore splash to infect leaves. [Rain after 16th hr & soil wet]	Leaves wet and warm enough for zoospores to infect leaves. [Leaves wet 45C-hrs ie ≥ 2.25 hours @ 20C]	Risk of Primary Infection [All conditions met = warm (>8C) and wet enough]
Clare North 29-30th	10.6	+	+	- (too dry)	-	-	No
Clare North 30-31st	7.0	+	+	- (too dry and cold)	-	-	No
Clare South 29-30th	11.8	+	+	- (too dry)	-	-	No
Clare South 30-31st	8.6	+	+	- (too dry and cold)	-	-	No

(+) = condition satisfied

(-) = condition not satisfied