

We are continuing to have a wetter than normal spring, combined with substantial marine layer on "clear" days. Both of these sources of moisture raise the mildew pressure index. If you have not started a powdery mildew program for the year it might be useful. I certainly am trying to stay on top of it.

Pre-flower bunches will soon start to break open and form flowers on some varieties. Disease control continues. Don't spray flowering plants too vigorously, the flowers are easily dislodged at this stage.

## **Phomopsis**

Phomopsis cane and leafspot appears as tiny dark spots with yellowish margins on leaf blades and veins. Spots first show 3 to 4 weeks following rain. Because moisture is required for infection, this disease is most severe in northern grape-growing regions (North Coast and northern San Joaquin Valley) where spring rains are common after budbreak. Infections generally occur when shoots begin to grow. That sounds a lot like what we're seeing this year!



Abound, Pristine, Captan and especially Sovran are recommended for springtime treatment. Not everyone has this, keep an eye out, if you saw mummified grapes late last year, then it is a good idea to treat this spring. Read the UCIPM\_fungicide...pdf (attached) and look it up on the UC IPM website.

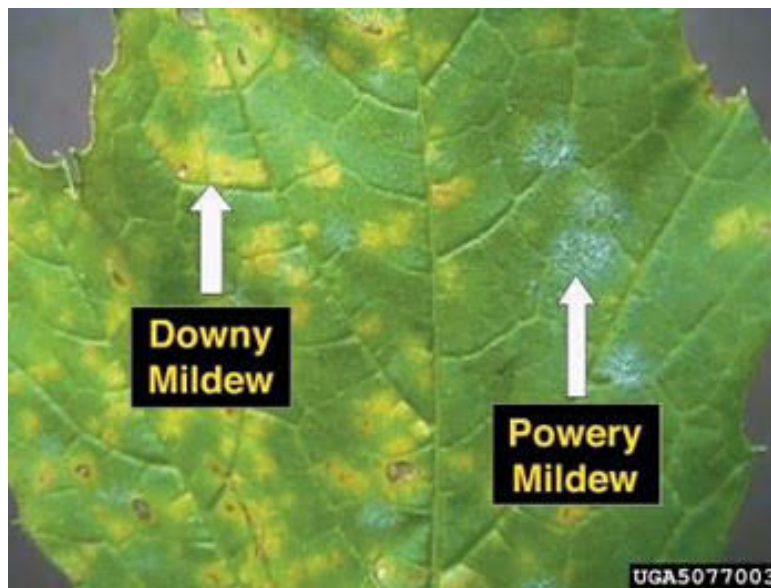
## **Powdery Mildew Control**

PM must be stopped early and continuously through the season. Each vineyard is more or less susceptible, but almost all may have an attack as the moisture/fog/rain conditions fluctuate throughout

the year. If you wait until you see it, it's too late. It is always present in the atmosphere here.

I have just one spray on only 1 varietal, I use a 14 day cycle. If you have more pressure due to a heavier marine layer you may consider a 10 day cycle. I started with Quintec because it is easy to use a tiny amount on a small block. Generally I start with Microthiol sulfur, switch to Rally in two weeks and back to Microthiol two weeks later. The one block which is clearly susceptible to Downey Mildew will get Pristine or Sovran instead of Rally. Next spray will be Quintec for everything except the one block will get Nordox (copper compound) for DM.

Here is a picture of grape leaves with early attacks of either DM or PM. It helps to know what to look for:



Eventually really bad Downey Mildew turns white and looks like this on a leaf and on the cane.



## Caterpillar Control

Don't forget to include Dipel to each acre's spray program. This controls all the caterpillar pests, especially Western Grapeleaf Skeletonizer.



This year I've heard reports of cut-worm damage on newly forming buds. They can take out your fruiting canes before they get started. Fortunately, Dipel, containing *Bacillus thuringiensis*, usually works well on cut-worms.

## PLUCK & TUCK

The new growth on most varieties will soon get long enough to train into the upper wires. You do not want the vines to be sprawling and shading the grape clusters as they develop. The grapes will need dappled sunlight later in the season. Get them ready for that now. Create narrow canopies which let in sunlight.

Here in Ramona we have better sunlight than any region in Europe. (We are as far south as Tunisia in North Africa). In most situations we do not have to pull the bottom most leaves from the canes to guarantee sufficient sunshine. If you've got a shallow water table, lots of growth or a shaded corner of the vineyard, then open up the fruiting zone.

## Imidacloprid

If you got Imidacloprid applied in April - way to go! If not, take advantage of any .25 inch rainfall to get it in the ground. If we don't get that rain you can use Mallet 2F (in a very tiny amount per acre) as a foliar spray for the next two months. This will get the Imidacloprid into the vines for the season. It is my least favorite method of application, but Pierce's Disease and white flies are much worse.