

Powdery Mildew, by Maxwell Norton, UC Cooperative Extension

Powdery mildew (PM) is a major disease of winegrapes, peaches, and many other crops and ornamentals. It favors the same temperatures that humans do which is 70-85F. The Merced County temperatures in the last week have been ideal for this disease to develop so if the crop was not protected with a fungicide, infections have probably already taken place. Sulfur continues to be the most common protectant and is applied either as a dust or as a wettable sulfur spray and is approved for organic farming. Farmers also have a wide range of safe fungicides available to help reduce their reliance on sulfur.

The wineries, in an effort to reduce sulfite residues in the must (crushed grapes) have been requiring growers to reduce the amount of sulfur they apply to winegrapes and to substitute synthetic fungicides that don't have these residue problems.

If you are a grape grower another way to minimize the number of sulfur applications is to use the powdery mildew index component of the UC Cooperative Extension Integrated Pest Management program. This system uses the number of hours in certain temperature ranges to calculate the relative infection rate of the PM organism. By calculating the PM index, growers can know when it is safe to stretch the interval in between sulfur applications and reduce the total amount applied.

By reducing sulfur dusting we are also helping air quality by reducing sulfur and dust emissions. Although the PM species that attacks peaches is different from that in grapes, the grape PM index will also give a good indication of infection threat for peaches also. This is important because peach growers sustained significant damage two seasons ago.

Growers can get more information by picking up a copy of the pest management guidelines for their respective crops at the Cooperative Extension office on the corner of Wardrobe and Grogan in Merced just north of the airport. Information is also on our IPM website at www.ucipm.ucdavis.edu. There are many publications on the UCIPM web site for home gardeners also.