

## 2011 Vintage Update: 19 July

By Michelle Moyer, Viticulture Extension Specialist, and Gary Grove, Plant Pathologist

### **Powdery Mildew and Botrytis Updates**

*Powdery Mildew (PM)*: Reports have been rolling in from around the state concerning emerging levels of powdery mildew on fruit clusters. The disease symptoms many are seeing now are a result of infections that happened 10+ days ago (perhaps as long as 21 days ago). This season's generally mild temperatures (highs in the 80's, lows in the 50-60's F), along with moderate humidity and cloudy conditions have created perfect conditions for powdery mildew infection and development. If you are seeing disease symptoms now, check your spray records for indications of exaggerated spray intervals earlier in the season (and take note for next year) or application at rates lower than specified on the product label. Slow pre-flowering development kept elongating clusters exposed in a state of susceptibility and extended spray intervals due to cool weather likely created gaps in disease management.

To clean up mildly infected fruit, an eradicant (such as a narrow-range petroleum oil or potassium bicarbonate) combined with a protectant is recommended. The compounds with eradicant activity are contact materials so thorough spray coverage is absolutely essential. Fruit with severe infections will likely not recover with an eradicant spray, as significant damage has already been made to the grapes, predisposing them to future rot problems. Be vigilant with your spray program. Make sure you are using proper rates, are getting good coverage, and making applications at appropriate intervals. Spray coverage and penetration is improved when combined with the viticulture techniques of shoot thinning and fruit-zone leaf removal. If you have a vineyard with significant levels of powdery mildew, avoid using fungicides that are in the high-risk categories for developing resistance. Our most resistant-prone fungicide group is the strobilurin / QoI class (Abound, Flint, Sovran, and Pristine). See our previous announcement regarding appropriate fungicides and their resistance risks:

<http://wine.wsu.edu/research-extension/2011/05/new-fungicides-for-grapevine-powdery-mildew-management-2011/>

*Botrytis bunch rot (BBR)*: We are also still in a critical period *Botrytis* infection (bloom to bunch closure). Those fruit with existing PM infections also have an increased risk of developing BBR after véraison, due to microscopic damages powdery mildew has made to the developing berries. Due to the increased likelihood of a delayed harvest, keep latent *Botrytis* infections in-check now to avoid more significant problems post-véraison. See our previous announcement regarding BBR management:

<http://wine.wsu.edu/research-extension/2011/03/managing-botrytis-bunch-rot-in-2011/>.

With potential for showers during the next several days, and because we are nearing bunch closure (the last opportunity to get fungicide to the inner portions of clusters), using a fungicide with activity against BBR should be considered. A dual purpose fungicide (activity against PM and BBR) such as Inspire Super, Adament, and Pristine will provide protection against both diseases if applied at this stage. However, avoid the use of Adament or Pristine if mildew is already present, as they have a strobilurin component (see precautions above).

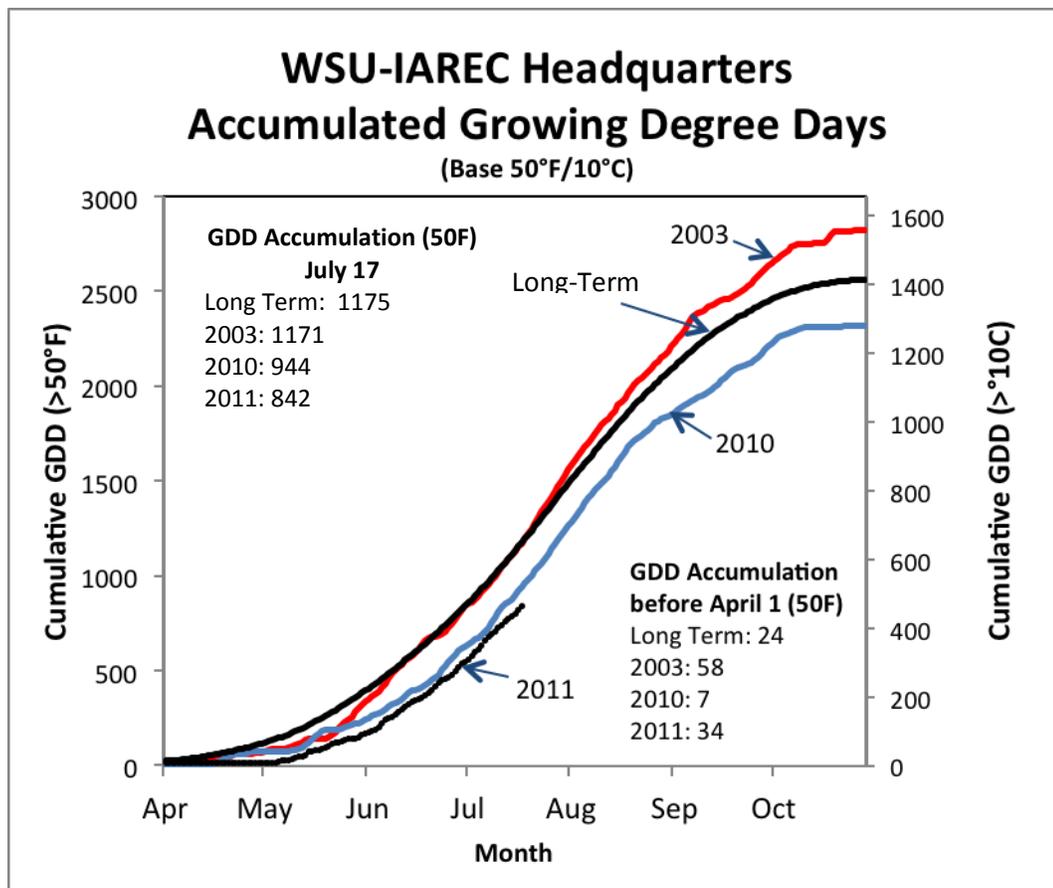
*Disease Alerts*: For those who are not aware, AgAlertz will send disease warnings directly to your phone or email. It is powered by WSU's AgWeatherNet. There are representative monitoring sites in most of

the AVA's, and the daily update of the relative risk of powdery mildew infection is invaluable. Though still in Beta form (forecast data has not been integrated yet), it will likely become a staple in your "Inbox". <http://www.agalertz.com>

We (Gary and I) also do updates and educational blurbs on the Viticulture and Enology Facebook site. For those with smartphones or regular internet access, this might be a good media choice to be connected to in order to receive timely updates. [www.facebook.com/WSU.Vit.Enol.Ext](http://www.facebook.com/WSU.Vit.Enol.Ext)

### Growing Degree Day Update

The vintage is still holding steady- and behind- last year. Vines are generally through set on the East side, nearing bunch closure in some areas. Vines are into bloom on the West side. Below is the Growing Degree Day (GDD) chart for the Yakima Valley AVA (WSU-HQ at IAREC), highlighting this year, the long term average, and two representative warm (2003) and cool (2010) years. More information regarding specific GDD accumulation for each of the Washington AVAs is located at: <http://wine.wsu.edu/research-extension/weather/growing-degree-days/>



**Figure 1- 2011 Growing Degree Day Accumulation for Yakima Valley.** Temperature data is from AgWeatherNet at WSU and is sourced from the WSU-HQ weather station located at the Irrigated Agriculture Research and Extension Center in Prosser, WA.