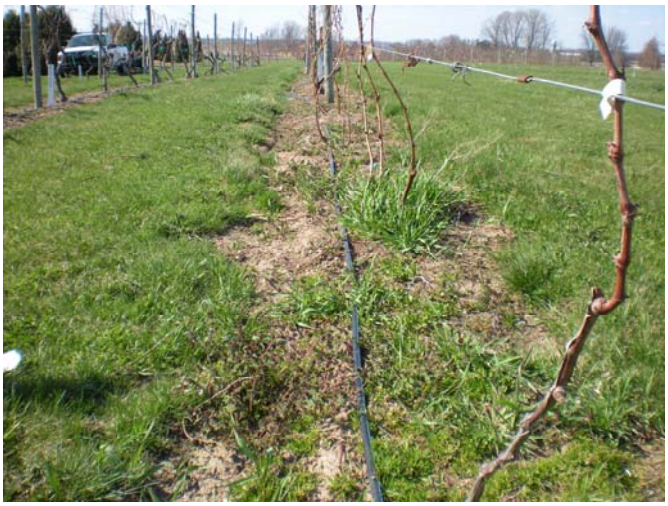
Vineyard IPM Scouting Report for week of May 11, 2009
UW-Extension Door County and Peninsular Agricultural Research Station
Sturgeon Bay, WI

Early Season Weed Control and Climbing Cutworm

If you are having or have had problems with climbing cutworms consider all your options before using an insecticide for control. Climbing cutworms is a generic name applied to many larvae of lepidopterous species. These larvae often consume whole swollen buds and will continue to cause damage until shoots are 2 to 4 inches in length. Another pest that causes similar damage during bud swell is the grape flea beetle, however damage from the grape flea beetle results in buds that are eaten from the inside out. The larvae of the climbing cutworm hide in debris, under rocks, or under the cover of weeds during the day. In late fall and early spring clean up your vineyard floor to reduce cover for larvae. In the spring, reduce weed cover in the vineyard rows using mechanical or chemical weed control. Vineyards planted on sandy or light textured soils will often are more prone to damage from climbing cutworms.



Get weeds under control early in the growing season to reduce the potential of damage from climbing cutworms

Disease Management

Growers in the southern part of the state likely will be seeing pressure from diseases now and throughout the rest of the growing season as shoots begin to elongate. Now is the time to look back to your vineyard notes and see what were your disease pressures in the vineyard last year. Most all vineyards in Wisconsin must manage powdery mildew. The rain in the southern half of the state and consistent rainfall events have likely caused ascospore release. Though temperatures have remained cool, grape tissue can become infected between 59 to 90F and 40 to 100% humidity. When scouting for powdery mildew look at leaves closest to the trunk and canes for disease development. Often these leaves become infected first since they are in close proximity to the trunk and canes where ascospores overwinter. The best way to manage any grape disease is to become familiar with the organism(s) causing the disease, become familiar with what grape varieties are more resistant and susceptible to certain diseases, use cultural techniques to improve air flow in the vineyard, manage weeds early to improve air flow, and become familiar with the spectrum of organisms that fungicides control.

Another important thing to remember is to not use fungicides repeatedly from the same chemical class. Applying chemicals from the same chemical class repeatedly can result in the target organisms developing resistance, which will result in the chemical no longer being effective. For example, Nova and Elite belong to the same chemical class. Of course you should also rotate herbicides and insecticides to delay or prevent the development of resistance. If you are unsure of the chemical classes of your pesticides, please consult your local agricultural extension agent.

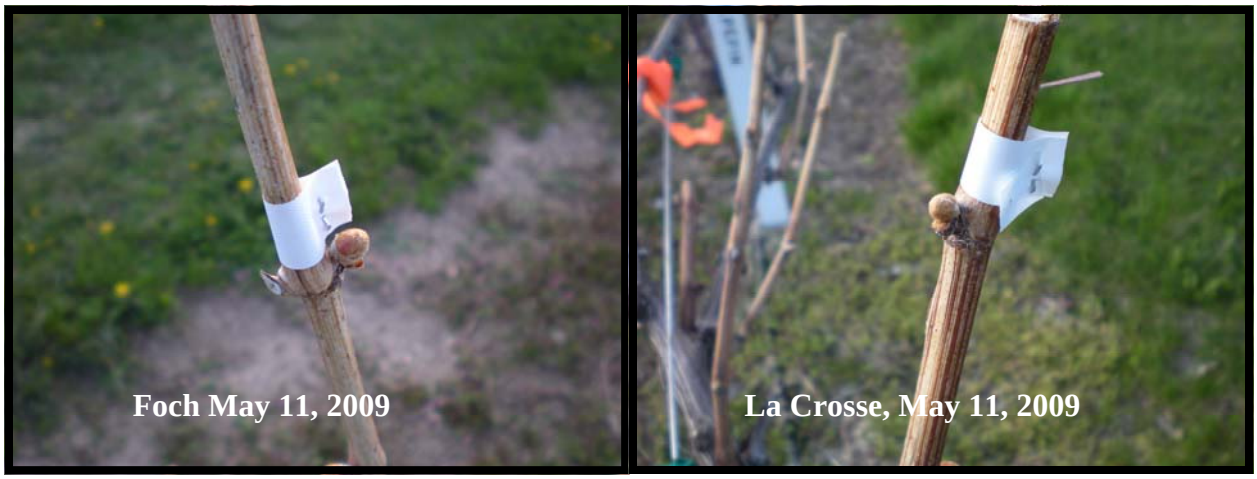
What is the modified method for calculating degree days?

Last week the averaging method of calculating degree days was discussed. However, you will notice in the table on page 3 that degree days are calculated using the modified method. The modified method differs from the averaging method by setting upper and lower degree thresholds. With the modified method, if the daily minimum temperature is below 50F, then the minimum is reset to 50F. For the upper temperature threshold, if the maximum temperature is above 86F, then the maximum is reset to 86F. The reasoning behind these selected temperatures is based on the fact that most plants don't grow very much below 50F and most plants don't grow very much once temperatures get above 86F.

Example: Calculate DD base 50, given 70 degrees maximum temperature and 35 degrees minimum temperature

$DD_{(base\ 50)} = (70 + 50)/2 - 50 = 10$ Compare using the simple method $(70 + 35)/2 = 2.5$ DD

How are well established mature grapevines developing in Sturgeon, Bay Wisconsin?



How are well established mature grapevines developing in Vernon County Wisconsin?

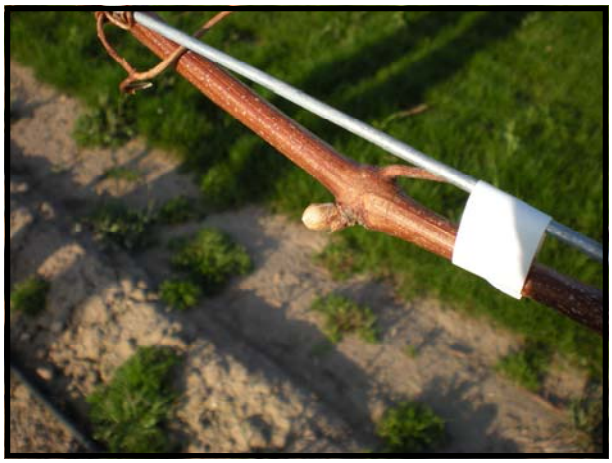
What stage are the second year grapevines at West Madison Agricultural Research Station?

Foch West Madison ARS May 11, 2009

La Crescent West Madison ARS May 11, 2009

What stage are the second year grapevines at Peninsular Agricultural Research Station?

Foch Peninsular ARS May 11, 2009



La Crescent Peninsular ARS May 11, 2009

ANSWERS

The Foch at West Madison are at stage E-L 11 to 12 or 4 leaves separated and shoots at about 4 inches. These vines grew very quickly, look back at last weeks report. The La Crescent at West Madison are not as far along as the Foch and are stage E-L 7 or first leaf separated from the shoot tip.

At the Peninsular ARS the Foch and La Crescent are both at stage E-L 4 or green tip with the leaf tissue visible.

Growing Degree Days[1] from April 1 to May 10

	2009	2008	5 Yr. average
Peninsular ARS	**145**	**114**	**149**
W. Madison ARS	**198**	**189**	**227[2]**

[1]Modified method
[2]3 year average for West Madison ARS.

Please scout your vineyards on a regularly scheduled basis in an effort to manage problem pests. This report contains information on scouting reports from specific locations and may not reflect pest problems in your vineyard. If you would like more information on IPM in grapes please contact Dean Volenberg at (920)746-2260 or dean.volenberg@ces.uwex.edu