

Vine news Viticulture Information News, Week of 24 August 2015 Columbia, MO



Vine Maintenance: Nutrient Deficiencies

Some vines are expressing nutrient deficiency symptoms. In most cases these deficiencies have been exacerbated by the large rainfall events that took place in the months of May, June, and July. Maintenance fertilizers applied may have been lost through erosion and leaching. Some growers are wondering if they can still petiole sample to identify the problem. Vines exhibiting a nutrient deficiency can be sampled and analyzed anytime the symptoms appear. However, unlike petiole sampling at bloom or veraison, two samples are needed (these are called paired samples). The first sample of petioles is from leaves showing the symptoms. The second petiole sample is from leaves that are healthy and collected from a similar position on a shoot as the symptomatic leaves. As an example, if symptomatic leaves are older basal leaves then collect healthy basal leaves from non-symptomatic vines. Having the results from a symptomatic and healthy sample provides a comparison. Additionally, if the symptoms are throughout a vineyard block, a soil sample should be taken and analyzed. If the analysis from the petiole and soil sample find nutrient deficiencies or the soil sample analysis shows the soil pH has changed and is contributing to the deficiency then soil amendments can be applied. If the problem is phosphorous, potassium, or magnesium deficiency then these can be corrected this fall. Similarly soil amendments can be applied this fall to correct soil pH.



You can have a petiole analysis done anytime during the growing season if you suspect a nutrient deficiency. See text for taking paired samples.

A basic soil test includes: pH, Na, OM, Bray I-P, Ca, Mg, and K

Regular plant tissue test includes: nitrogen, phosphorous, potassium, calcium, and magnesium

A paired plant tissue sample that includes a symptomatic sample and healthy sample. The cost for the healthy sample is half the price.

For more information on plant tissue analysis and soil testing see the link below

[University of Missouri Soil and Plant Testing Laboratory](http://www.missouri.edu/~soilplant/)

The early bird registration for VitiNord is coming up on September 1, 2015. This three day conference is taking place in Nebraska City, NE on November 11-13, 2015. The conference only takes place every three years and focuses on research and practices for growing wine grapes and making wine in cold-climates. This is the first time the conference has been in the United States.

[VitiNord Conference Schedule](#)

[VitiNord Conference Speakers](#)

[VitiNord Registration and Details](#)

[VitiNord Lied Lodge and Conference Center](#)
2700 Sylvan Road, Nebraska City, NE 68410



Phenology from Gasconade County



Chambourcin on August 24, 2015. Gasconade County



Vignoles on August 24, 2015. Gasconade County

Cumulative Growing Degree Days for the Seven Grape Growing Regions of Missouri from April 1 to August 24, 2015.

Region	Location by County	Growing Degree Days ¹		
		2015	2014	30 Year Average
Augusta	St. Charles	2872	2735	2771
Hermann	Gasconade	2740	2580	2658
Ozark Highland	Phelps	2997	2874	2850
Ozark Mountain	Lawrence	2930	2798	2823
Southeast	Ste. Genevieve	3022	2835	2855
Central	Boone	2774	2628	2734
Western	Ray	2674	2636	2663

¹Growing degree days at base 50 from April 1 to August 24, 2015. Data compiled from Useful and Useable at <https://mygeohub.org/groups/u2u/tools>. Click on link below to determine growing degree days in your area.

To determine the number of growing degree days accumulated in your area since April 1, click this link [Search for GDD at your location using this tool](#).

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 573-882-0476 or volenbergd@missouri.edu