



## Viticulture, enology and marketing for cold-hardy grapes



# News You Can Use

## Grapevine Nutrition

March 2015



*Iron chlorosis on grapes.*

*Photo: Harlene Hatterman-Valenti*

As cold-hardy winegrape cultivars are still fairly new, optimal soil and tissue nutrient concentration ranges have not yet been established, and growers are relying on recommendations developed for *Vitis vinifera* and *V. labrusca* cultivars grown in more traditional (i.e., warmer) climates. Therefore, one of the goals of the *Northern Grapes Project* is to obtain baseline soil properties and tissue nutrient concentrations for the cold-hardy hybrids.

Leading this effort are Carl Rosen, a professor in the Department of Soil, Water, and Climate at the University of Minnesota, and his technician James Crants. Researchers are collecting soil and tissue samples in 15 locations spread across Minnesota, Iowa, North Dakota, South Dakota, and New York, which are sent to AgVise Laboratories for analysis. These results are summarized, and are also correlated with yield, vine, and fruit parameters. This research should result in nutrient recommendations that are optimized for the cold-hardy hybrids.

Below are links to three grapevine nutrition resources generated via the *Northern Grapes Project*:

**Vine Nutrition Webinar**, by Carl Rosen and Paul Domoto. This webinar covers the basics of vine nutrition.

Webinar: <http://www.youtube.com/watch?v=easAzwROKrc&list=PLGIR49aM1wm4SWL7XS-oO9z8vaFtlll>

Link to slides: <http://northerngrapesproject.org/wp-content/uploads/2012/03/Northern-Grapes-Symposium-March-12-Grapevine-Nutrition.pdf>

**Grapevine Nutrition and Juice Quality Research Report**, by Carl Rosen and James Crants. This report summarizes the nutrition-related work that has been done in Years 1-3 of the Northern Grapes Project.  
<http://northerngrapesproject.org/wp-content/uploads/2015/02/Mineral-nutrition-and-soil-management.pdf>

**Assessing the Nutrient Status of Cold-Hardy Wine Grapes**, by Carl Rosen and James Crants. This newsletter article (starts on page 6 of the issue linked below) covers some basics of vine nutrient status and discusses the work being done as part of the Northern Grapes Project.  
<http://northerngrapesproject.org/wp-content/uploads/2014/02/2014FebruaryNGPnewsletter.pdf>

The Northern Grapes Project is funded by the USDA's Specialty Crops Research Initiative Program of the National Institute for Food and Agriculture, Project #2011-51181-30850