



Welcome to our monthly *Vine to Wine* newsletter! **Oregon Wine Research Institute** faculty and staff work to provide research-based viticulture, enology and wine business information for the advancement of the Oregon wine industry, and this newsletter allows us to extend that information to you along with other news and events. We welcome industry questions, so contact **OWRI team members** with input, feedback or challenges you face in the vineyard, cellar, or tasting room.

Program Coordinator Report

Historically the wine industry has been one steeped in tradition. And why not, humans have been making fermented beverages for thousands of years. Oregon's wine making has been informed by practices in Burgundy and other old world regions, who have set the standard for quality for centuries. But the very nature of research is to look ahead at what may or can be changed or improved, something that may cause some discomfort in the wine world. In this issue of *Vine to Wine*, our research faculty delve into two areas of contemporary interest in viticulture that have the possibility to revolutionize both our understanding of grapevines, and where and how they grow.

Soil and plant microbiomes have been areas of great curiosity and attention recently, yet Dr. Paul Schreiner has been studying one key aspect of the soil for many years: the mycorrhizae that are the conduit for soil nutrients to enter the vine roots, a vital process for healthy vines. What is underfoot is difficult for growers to visualize, yet through research we can understand the myriad of life that affects soil quality and plant growth, and make recommendations that will promote both. Dr. Schreiner provides specific suggestions for both pre- and post-plant management of arbuscular mycorrhizal fungi that can promote nutrient uptake, in particular phosphorus.

In the U.S. and Europe in particular the subject of genomic modification of living organisms is a delicate topic, as political as it is scientific. Yet, it takes very little imagination to understand the possibilities for genetic engineering or editing to improve plant health, and hence human health. For example, a more disease resistant grapevine will require less pesticide inputs. At OWRI, Dr. Laurent Deluc is exploring methods to accentuate desirable traits in grapevines by gene identification and new breeding methods that accelerate the natural mutation process. Genetic alteration, whether through direct engineering or rapid breeding is a delicate matter in our tradition-laden industry, but it holds great promise, such as the Pierce's Disease resistant vines developed by Dr. Andy Walker at UC Davis. The key is to understand the technology and process, and objectively weigh the pros and cons, and then determine its value to industry and humanity.

It is exciting that OWRI scientists are paving the way to a greater understanding of the soil microbiome and unlocking the genetic potential of grapevines. After you read their articles, you'll understand why.

Mark L. Chien

[OSU Oregon Wine Research Institute](#)

Research Focus

Managing mycorrhizal fungi and soil health in vineyards

The study of soil microbiome in Oregon vineyards began well before the word microbiome entered the popular lexicon. Dr. Paul Schreiner, Research Plant Physiologist at USDA-ARS, has recommendations for managing mycorrhizal fungi and soil health in vineyards.

Grapevine Production in the era of genome engineering

Dr. Laurent Deluc, Associate Professor in the OSU Department of Horticulture, provides information how developments in genomic technology may lead to improvements in grapevine health, quality, and sustainability.

OWRI Seminar Series

Research and extension imperatives in Virginia's evolving wine industry: past, present and future

Presented by: Dr. Tony Wolf, Viticulture Extension Specialist, Virginia Tech

Tuesday, August 7, 2018 | 4:00PM PST

[OSU Kidder Hall 202](#)

Dr. Wolf's research has focused on varietal adaptation to a warm, humid growing season punctuated by low temperature episodes in winter, various aspects of canopy management, and several aspects of disease management. His presentation will recount some of this research, describe current research interests, and highlight some of the extension and teaching outputs of the past 10 years.

To watch this event live, visit live.oregonstate.edu. Live chat will NOT be available, however, online participants can submit questions during the seminar to mark.chien@oregonstate.edu and they will be answered at the end.

If you missed any of the previous seminars, or want to review them again, you can watch the recordings from the OWRI archive [here](#).

Faculty Focus: Dr. Patty Skinkis



Patty Skinkis, OSU statewide extension viticulturist and a core faculty member at the Oregon Wine Research Institute has focused a multi-year research project on how grape yields affect wine quality, helping grape growers to determine the optimal production level for their vineyards. For more information how Dr. Skinkis' work impacts Oregon's wine industry, view here: <https://youtu.be/5yEfKDySPAE>

2018 Summer Technical Newsletter

For those of you who missed the announcement last month, the 2018 Summer Technical Newsletter is now available. The newsletter contains research updates and a comprehensive list of publications summarizing research conducted by faculty of the Oregon Wine Research Institute at Oregon State University. Access a copy of the newsletter [here](#). [OWRI Technical Newsletter Archive](#).

Sensory Panel Tasting Invite

You are invited to participate in a sensory panel tasting of Chardonnay wines investigating

how nutrient additions (vineyard versus winery) impact quality. If you or your staff (they must have at minimum 5 years' experience with chardonnay wines) are available to take part in this sensory evaluation, contact elizabeth.tomasino@oregonstate.edu with your preferred date. You only need to attend ONE session.

Date/Time (select one):

Tuesday, August 7 | 10:00 AM - 12:00 PM

Tuesday, August 8 | 2:00 PM - 4:00 PM

Friday, August 10 | 10:00 AM - 12:00 PM

Friday, August 10 | 2:00 PM - 4:00 PM

Location: auditorium at Yamhill County Extension Office, 2050 NE Lafayette Ave., McMinnville, OR 97128, [map](#)

Please share this invitation with others in your company who would be excellent tasters for this evaluation. Reminders will be sent out closer to the tasting. Please contact [Dr. Elizabeth Tomasino](#) with any questions.

Resources from OSU Extension



Scheduling Irrigation with a Pressure Chamber: A two-part video series on how to use a pressure chamber to determine when to irrigate. [Part 1: the concepts](#) and [Part II: how-to guide](#). Author: Dr. Alex Levin, assistant professor (viticulture), OSU-Southern Oregon Research & Extension Center.

Protecting Oregon: The Importance of Clean Plants

Economic losses have been a reality in many vineyards across the state faced with grapevines testing positive for viruses. [Read more](#) about what it means to have "clean" plant material, the issues at hand, what can be done, and what is being proposed for Oregon.

How to Interpret Vine Tissue Nutrient Results



Are you trying to interpret the results of your bloom and veraison tissue samples? If so, use this [handout](#) to help you understand vine nutrition and nutrient deficiency levels. Also, consider reading the article, "[Monitoring Grapevine Nutrition](#)" or check out our [Grapevine Nutrition module](#), all products of OSU Extension.

From the Archive

[Crop Estimation- It's All about Timing and Good Data](#)- Learn how to better estimate the crop level you have with cluster weight data collected at lag or any time post-bloom.

Events

August 7 | OWRI Seminar Series- Dr. Tony Wolf, Corvallis, OR. Free and open to the public.

August 29 | From the Bud to Bin: Vineyard Management Effects on Yield (OSU Workshop), McMinnville, OR. Register [online here](#) by August 15, 2018.

Have a particular topic or question you would like to see addressed in the *Vine to Wine*? Please [contact us](#).



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