

# VITICULTURE NOTES ...... July 2014 SUPPLEMENT

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A few things to pass along here of possible interest. Please see Dr. Anton Baudoin's following comments on the fungicide resistance research that his lab is conducting. Dr. Baudoin and his students have previously provided extremely useful information to us on powdery and downy mildew resistance to strobilurin fungicides, as well as powdery mildew resistance to DMI fungicides. His work was greatly aided by cooperating growers willing to send Dr. Baudoin fungal isolates from around the state. Here he is asking for similar help regarding two other classes of fungicide, as well as some assistance with ongoing work with botrytis. Help him out if you can – and if you're unfortunately seeing one or more of these diseases in your vineyard. Dr. Baudoin's contact information is at the end of his article.

Also, if you're close to Winchester or Frederick County, Virginia, please note two other potential items of interest here: Our Agricultural Research and Extension Center and the Frederick County Cooperative Extension Office are teaming for an open-house at the AREC on Saturday, 16 August, 1:00 to 5:00 pm. Details are included below. Finally, please note our (viticulture group) interest in hiring two research technicians in August.

## I. Fungal resistance research assistance sought

Dr. Anton Baudoin, Plant pathologist, Virginia Tech

Dear vineyard manager (or please forward to vineyard manager):

We have several research projects active this summer, and hope some of you may be able and willing to assist with one or more of those.

1. Last fall, we discovered a case of **Quintec resistance of grape powdery mildew** in a commercial vineyard in the western part of Virginia. This summer, we are trying to determine whether this is an isolated case, or whether Quintec-resistant strains may occur elsewhere as well. The 2013 isolates grew well on grape leaves and plants treated with full label rates. Quintec has been a very effective powdery mildew fungicide, with a mode of action different from other powdery mildew fungicides, so we would like to retain it as an option. There is no reason for a recommendation against its use at this time, but growers should be cautious to avoid overuse – generally, no more than two applications per season. The Virginia Wine Board is supporting a resistance survey, and we would like to collect powdery mildew samples, especially from vineyards in western Virginia (or elsewhere) that have used Quintec in recent years.

2. We are also interested in the potential of downy mildew resistance to phosphite fungicides. If your vineyard has a **history of phosphite** use (say 4-5 applications or more annually), and especially if you have had difficulty controlling **downy mildew** with phosphites, please contact

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me to discuss the possibility of providing some research samples. We are trying to determine to what extent there may be variability in phosphite sensitivity of Virginia grape downy mildew. Phosphite fungicides include Agri-Fos, Aliette, Fosphite, Fungi-phite, K-Phite, Legion, Phostrol, ProPhyt, Rampart, Reliant, Topaz, and several others. Relative to other anti-downy mildew fungicides, we know that resistance to strobilurins is widespread, but if anyone has issues with other materials (Revus, Presidio, Forum, Ranman, etc.) we can investigate those as well.

3. **Botrytis** may be an issue later in the season, and we are accepting samples of this pathogen as well. Since part of our Botrytis project is to study to what extent Botrytis populations (and fungicide resistance) may migrate from one crop to another, we are also STRONGLY interested in nurseries or greenhouses as well as strawberry fields that are located **in close proximity** to commercial vineyards. Just letting us know of such locations would be very helpful (we have received a few tips in the past).

In addition, feel free to contact me if you have unusual outbreaks of downy or powdery mildew that might be due to fungicide resistance, meaning that fungicides did not provide the expected level of control even though application rates, intervals, and timing appear to have been correct (and rain did not wash it all off). Provision of spray history information is critical. Before sending samples, please contact me so that proper sampling procedures may be followed.

Anton Baudoin Associate Professor of Plant Pathology, Dept of Plant Pathology, Physiology & Weed Science

Mailing: PPWS (0331) 417 Price Hall, 117 Drillfield Drive Virginia Tech Blacksburg, VA 24061 Office phone: 540-231-5757 Fax (departmental): 540-231-7477 Email: <u>abaudoin@vt.edu</u>

II. Alson H. Smith Jr. Agricultural Research and Extension Center (AREC) Public Open House 16 August 2014

The faculty, staff, and students at Virginia Tech's Alson H. Smith, Jr. Agricultural Research and Extension Center and Virginia Cooperative Extension's Frederick County Office invite you to join us for a public OPEN HOUSE on August 16 from 1:00 PM to 5:00 PM.

 $\bigcirc$  Come meet the scientists who work at the AREC.

Learn about how our programs impact fruit growers throughout Virginia, and tour our research plots.

C Cold drinks and locally made desserts will be provided.

For more information contact Debra Marple at: 540-869-2560 or dmarple@vt.edu.

We hope to see you on August 16<sup>th</sup>!

Sincerely,

The organizing committee: Tony Wolf, Professor and Station Director Greg Peck, Assistant Professor Mark Sutphin, Virginia Cooperative Extension-Northern Shenandoah Valley

The Alson H. Smith, Jr. Agricultural Research and Extension Center serves Virginia's commercial fruit and value-added, horticultural food crops industries through research, educational programs, development of sustainable production systems and technologies, and increased public knowledge of horticultural opportunities and benefits. Please visit our website to learn more about our current research and information on tree fruit and grapes. http://www.arec.vaes.vt.edu/alson-h-smith/

### Directions: The facility is located at 595 Laurel Grove Road, Winchester, VA 22602.

From I-81: take the Stephens City exit (Exit 307). Go west into Stephens City on Fairfax Street. Proceed straight through Stephens City onto Rt. 631 (Fairfax Street becomes Marlboro Road). Continue west on Marlboro Road for approximately 3.5 miles. When Marlboro Road dead-ends at a "T", turn right (north) onto Middle Road (Rt. 628). Proceed on Middle Road for 1.5 miles. Turn left (west) onto Laurel Grove Road (Rt. 629). Travel 0.8 miles to the AREC, which will be on your left.





## III. Two research technician positions sought

AHS Jr. AREC, Frederick County, Virginia Viticulture Program

Each summer, towards the end of August, we have to say "so long" to the summer help as well as one or more graduate students who leave for Blacksburg or other schools for the academic year. As well as being a sad occasion to say goodbye, it leaves those of us who stay in a bit of a bind, as some of the busiest work lies in the following 2 to 3 months with berry sampling, fruit chemistry analyses, and of course harvest. We are therefore looking to fill two part-time positions are early as August 1. These are both "emergency hire" positions and will initially, at least, be for no more than 130 days of employment. We may convert one into a longer term position.

### **Position Summary:**

Primary responsibilities are to assist faculty and research associates with field and laboratory work associated with agricultural research experiments. Duties may include, and not limited to, collecting and accurately identifying insects, using hand tools to manage grapevine vegetative canopies, data collection and recording from field and lab experiments, and laboratory procedures associated with DNA extraction from plants and insects. Position will require local travel in state vehicle to cooperating research sites and the ability to work with others in a team environment. This is an off-campus position at the Alson H. Smith Jr. Agricultural Research and Extension Center (AREC), located in Frederick County, Virginia.

### **Required qualifications:**

High school diploma or GED (high school equivalency); experience working outdoors; ability to

stand and walk for extended periods of time, and to repetitively lift up to 25 pounds; interest in scientific research; ability to comprehend and execute written or verbal instructions without error and ability to accurately count and legibly record data. Must be willing, on occasion, to work on weekends or beyond regular work hours.

## Preferred qualifications:

B.S. in Biology, Entomology, Horticulture, Agricultural Science, or a related field. Knowledge of entomology; experience in an agricultural research setting; laboratory and/or field research experience; experience with data collection; familiarity with Microsoft Excel; legal ability to work in the U.S. for at least two years.

**Employment conditions:** Must have a criminal background check. Must have a driver's license check.

If interested, please contact Dr. Tony Wolf (540-869-2560 x10) or <u>vitis@vt.edu</u>, or Dr. Teresa Stoepler (<u>Stoepler@vt.edu</u>).

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If you are an individual with a disability and desire accommodation please contact the hiring department.