# Ohio Grape-Wine Electronic Newsletter

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# 28 April 2017 (07)

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Know Your Grape and Wine Experts

# Fungicide Spray Guide for Wine Grapes Gets a New Look! By Melanie L. Lewis Ivey, State Fruit Pathologist

This year we gave the annual "Developing An Effective Fungicide Spray Program for Wine Grapes in Ohio" a new look and we also added two new features to the publication:

- 1) information on the relative cost of a specific fungicide treatment and
- 2) an at-a-glance spray program guide (shown below).

The new guide can be downloaded on the Grape IPM webpage (https://ohiograpeweb.cfaes.ohio-state.edu/ipm), the Fruit Pathology webpage (u.osu.edu/fruitpathology/) or directly by <u>clicking here</u>. To receive a hard copy of the guide please send a request to Rachel Medina (medina.72@osu.edu).

Spray No.	Dormant	0	1	2	3	4	6	7		9	10	11	12
Growth Stage	Dormant	Bud Break	1 inch	3-5 inch	10-12 inch	Pre-bloom To Early Bloom	Fruit set (First post- bloom)	Pea-size (Second post- bloom)	Pea-size (Third post- bloom)	Berry touch (Fourth post- bloom)	Berry touch (Fifth post- bloom)	Veralson	Pre-harves
						Critical Period For Clusters							
	Anthracnose		Phomopsis										
	Sulforix		Mancozeb	Mancozeb	Mancozeb								
				Powdery mile	lew								
				Stylet oil	Quintec	Revus Top	Quintec	Revus Top	Quintec	Revus Top	Torino	Torino	Potassium saits
				Downy milde	w								
				Mancozeb	Mancozeb	Revus Top	Ridomil Gold MZ	Revus Top	Mancozeb	Revus Top	Captan	Captan	Ranman
					Black rot					-			
					Black rot Mancozeb	Revus Top	Mancozeb	Revus Top	Mancozeb				
					a constitution	Revus Top	Mancozeb	Revus Top	Mancozeb		Botrytis bunch		

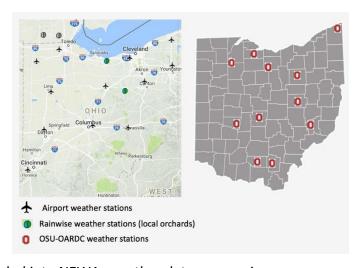
#### **NEWA to Ohio!**

# By Melanie Lewis Ivey, Fruit Pathologist

(Previously published in the April 2017 issue of Ohio's Fruit News)

Real-time and past weather data are now being linked to models that guide fruit crop and pest management in Ohio. Ohio recently became a member of Network for Environment and Weather Applications (NEWA) to provide fruit growers with tools to implement precision Integrated Pest Management (IPM) and crop production practices.

Dr. Matt Wallhead (USDA-Agricultural Research Service (ARS) and Dr. Melanie Lewis Ivey (Fruit Pathologist, The Ohio State University), both located in Wooster, teamed up to coordinate the connection of 28 weather stations across the state with NEWA. Currently 14 of these weather stations are on-line and ten more, located at the OSU-OARDC Outlying Research Stations, will be on-line by the end of May 2017. NEWA is operated by the New York State IPM Program and the Northeast Regional Climate Center centered at Cornell University. Weather data are radio transmitted from



weather stations to the internet and then uploaded into NEWA; weather data summaries, crop production tools, and IPM forecasts are automatically calculated and displayed.

Pesticide use in Ohio orchards and vineyards represents a significant economic cost to growers. NEWA users have reported that on average they can save \$19,500 per year in spray costs as a direct result of using NEWA pest forecast models (J. Carroll, 2007). The pest forecast models are theoretical predictions and forecasts and should not be substituted for actual observations of plant growth stage, pest presence, and disease occurrence determined through scouting or insect pheromone traps. On the NEWA website (<a href="http://newa.cornell.edu/">http://newa.cornell.edu/</a>) weather-based IPM forecast tools for fruit crops can be accessed for *free to anyone in Ohio*. These tools include-

# **Fruit Diseases:**

Apple scab infection events
Apple scab ascospore maturity
Black rot of grapes
Fire blight cougar blight
Grapevine downy mildew
DMCast
Grapevine powdery mildew
Phomopsis cane & leaf spot
Sooty blotch & flyspeck

Fruit Insect Pests:

Apple maggot
Codling moth
Grape berry moth
Oblique banded leafroller
Oriental fruit moth
Plum curculio
Spotted tentiform leafminer

Fruit Crop Management:
Apple carbohydrate
thinning
Apple frost risk
Cornell apple irrigation
model

Grape bud hardiness
Soil temperature map

NEWA is a partnership of land grant universities and grower associations. Each member state pays a yearly fee of \$1750 to connect to NEWA. Individual growers can also connect to NEWA. Dr. Wallhead is Ohio's state NEWA manager and has provided support for NEWA for 2017 and 2018. Please contact Dr. Wallhead (<a href="matthew.wallhead@ars.usda.gov">matthew.wallhead@ars.usda.gov</a> OR 330-202-3555) for more information on connecting your farm to NEWA. For more information on fruit disease management contact Dr. Lewis Ivey (<a href="mailto:ivey.14@osu.edu">ivey.14@osu.edu</a>, 330-263-3859). For more information on fruit pest management contact Dr. Celeste Welty (<a href="welly.u

#### Reference:

Juliet E. Carroll. 2007. Impact of the NYS IPM Program's Network for Environment & Weather Awareness (NEWA) on agricultural production. NYS IPM Program. Available at: http://newa.cornell.edu/uploads/documents/NEWAsurveyReport.pdf

# OARDC-Wooster April 2017 Vineyard Update

By Diane Kinney and Dr. Imed Dami

# **Grape Phenology:**

In Wooster, all grape varieties have passed budburst (see table below).

Variety	50% BB	GDD 1 Jan - (BB-1)	GDD 1 Apr - (BB-1)	
Cab franc	16-Apr	152	67	
Chambourcin	20-Apr	201	116	
Chardonnay	16-Apr	152	67	
Frontenac	17-Apr	171	86	
Frontenac gris	18-Apr	178	93	
La Crescent	15-Apr	139	54	
Marquette	14-Apr	131	46	
Aromella	19-Apr	186	100	
Arandell	17-Apr	171	86	
Riesling	18-Apr	178	93	
Sauvignon blanc (14)	18-Apr	178	93	
Traminette	23-Apr	224	139	

# All vineyard photos taken 25 April 17:







Chardonnay



Riesling



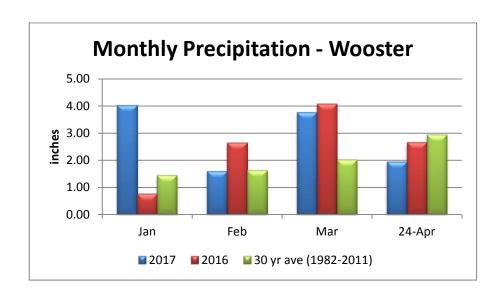


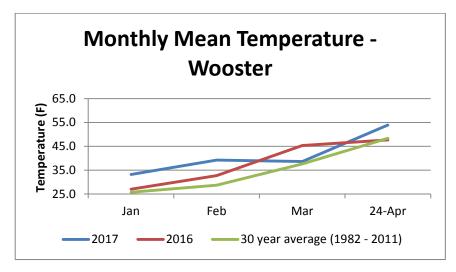


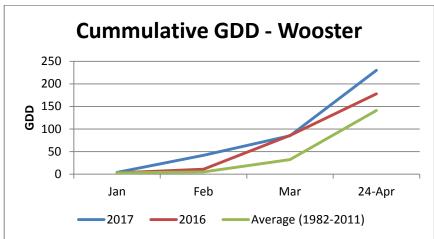
Frontenac Aromella Chambourcin

# **Weather Conditions**:

In Wooster, due to a very wet January, we have maintained well above the 30 year average in precipitation (11.4" vs 8.1") typical for this time of year. When reviewing temperature, even with a drop in temperatures during March (  $38.6\,^{\circ}F$  vs 30 year ave of  $37.6\,^{\circ}F$ ), we have stayed well above normal temperatures throughout the early growing season. This reflects in our GDD's which currently stand (as of April 24) at 230 vs the 30 year average of 141 cumulatively from January 1, 2017.







# **Cultural Practices:**

Pruning was completed in Wooster in early April. The vineyard was sprayed with Round up the second week of April and dehilling was completed during the third week. No cover sprays have been applied at this time.

By: Andy Kirk

Vineyards at the Ashtabula Agricultural Research Station are nearing bud break. In Regent and Concord vineyards, which represent two of our earlier varieties, bud leaves have begun to open. Many other varieties are in the Wooly bud stage of development. At various points in the last two weeks, including the 20<sup>th</sup> and 24<sup>th</sup> of April, day time and evening temperatures have been as much as 15 degrees cooler in Kingsville (2.5 miles from L.E.), compared to locations only a few miles south such as Jefferson (~10 miles from L.E). Many vineyards in the Grand River Valley were beginning to see bud break as of last Tuesday (April 18<sup>th</sup>).

Early season weeds we saw were mostly lamb's quarter, chickweed, and quackgrass. Our first spray, based on recommendations from Dr. Lewis-Ivey, will be at around 1" shoot growth for phomopsis, anthracnose, black rot, downy mildew, and powedery mildew. The cooldown in temperatures (as well as our small acreage) has afforded us time to delay pruning in several blocks in an effort to slow down bud break (see Friend and Trought 2007, details below). Our pruning should be finished this week or next. After an application of glyphosate and a pre-emergent onto our vineyard mounds a few weeks ago, we will be hilling down our vines in early to mid-May.

#### Referenced:

Friend, A. P., & Trought, M. C. (2007). Delayed winter spur-pruning in New Zealand can alter yield components of Merlot grapevines. Australian Journal of Grape and Wine Research, 13(3), 157-164.

# Vine & Wine News @ "Buckeye Appellation"

By: Diane Kinney and Imed Dami, HCS-OSU

Vine & Wine News continues to provide updates on grape growing and wine making in Ohio and elsewhere. These updates will be posted on the program website, Buckeye Appellation at: <a href="http://ohiograpeweb.cfaes.ohio-state.edu/">http://ohiograpeweb.cfaes.ohio-state.edu/</a>. We would like to invite you to visit the website on a regular basis to help inform you of what our OSU Team has available to you through OGEN, TGE, research updates, events and news. Our hope is that it becomes a resource you look up periodically. So why not bookmark this site today?

In the past month, we have posted the following:

## **Educational Materials:**

- Ohio Grape Electronic Newsletter (<u>OGEN</u>) on homepage and tab (current issue).
- The Grape Exchange (TGE) on the homepage and tab (latest posting on 21 April).

#### **Educational Events:**

- April 18: 2017 Pinot Gris Grape & Wine Production School
- April 20: <u>Drift Happens!</u>

#### **News:**

• Industry Retirement Party for Dave Scurlock

#### Social Media:

• OSU Ohio Grape IPM

### Misc:

• Multiple new photos: Extension Activities, Misc/fun, Student Training, Research Activities

# **OSU Grape & Wine Research & Outreach Specialist**

Please contact the following Research, Extension/Outreach Specialists, and Educators if you have any questions relating to their respective field of expertise.

		Contact Information	Area of Expertise & Assistance		
Name & Address	Phone Email & Website		Provided		
Dr. Melanie Lewis Ivey, Asst. Professor Dept. Plant Pathology 224 Selby Hall OARDC 1680 Madison Avenue Wooster, OH 44691	330-263-3849 330-465-0309	E-mail: ivey.14@osu.edu Website: http://www.oardc.ohio- state.edu/fruitpathology/ Facebook: www.facebook.com/fruitpathology	Grape Diseases Diagnostics and Management. Recommendation on grape fungicides and biocontrols. Good Agricultural Practices and Food Safety Recommendations.		
Dr. Celeste Welty Dept. of Entomology Columbus, Ohio	614-292-2803	E-mail: welty.1@osu.edu	Fruit and vegetable Insects		
Dr. Doug Doohan, Professor Dept. Horticulture & Crop Science 205 Gourley Hall – OARDC 1680 Madison Avenue Wooster, OH 44691	330-202-3593	E-mail: doohan.1@osu.edu Website: www.oardc.ohio- state.edu/weedworkshop/default.asp	Vineyard weeds and control. Recommendation on herbicides		
Dr. Imed Dami, Associate Professor & Viticulture State Specialist Dept. Horticulture & Crop Science 216 Gourley Hall – OARDC	330-263-3882	E-mail: dami.1@osu.edu	Viticulture research and statewide extension & outreach programs. Recommendation on variety selection. Imed is the primary research contact		
1680 Madison Avenue Wooster, OH 44691		Website: oardc.osu.edu/grapeweb/	of the viticulture program.		

		Contact Information	Area of Expertise& Assistance Provided	
Name & Address	Phone	Email & Website		
Or. Elizabeth Long, Assistant Professor OSU/OARDC Entomologist 105 Thorne Hall, Wooster, OH 44691	330-263-3725	E-mail: long1541@osu.edu	Fruit and vegetable insects	
Dr. Gary Gao, Small Fruit Specialist and Associate Professor, OSU South Centers 1864 Shyville Road, Piketon, OH 45661 OSU Campus in Columbus Room 256B, Howlett Hall, 2001 Fyffe Ct Columbus, OH 43201	740-289-2071 ext.123 Fax:740-289-4591	E-mail: gao.2@cfaes.osu.edu Website: http://southcenters.osu.edu/	Viticulture Research and Outreach, VEAP visits in southern Ohio, vineyard management practices, soil fertility and plant nutrition, fruit quality improvement, variety evaluation, table and wine grape production	
David Scurlock, Viticulture Outreach Specialist 118 Gourley Hall – OARDC 1680 Madison Avenue Wooster, OH 44691	330-263-3825	E-mail: scurlock.2@osu.edu Website: oardc.osu.edu/grapeweb/	Evaluation of site suitability for vineyard establishment and all aspects of grape production practices in northern Ohio. David is the primary extension contact of the viticulture program	
Todd Steiner, Enology Program Manager & Outreach Specialist Dept. Horticulture & Crop Science 118 Gourley Hall – OARDC 1680 Madison Avenue Wooster, OH 44691	330-263-3881	E-mail: steiner.4@osu.edu Website: oardc.osu.edu/grapeweb/	Commercial wine production, sensory evaluation, laboratory analysis/setup and winery establishment. Todd is the primary research and extension contact of the enology program	
Andrew Kirk, AARS Station Manager Ashtabula Agricultural Research Station 2625 South Ridge Road Kingsville, OH 44048	440-224-0273	E-mail: Website: <a href="https://www.oardc.ohio-state.edu/branches/branchinfo.asp?id=1">www.oardc.ohio-state.edu/branches/branchinfo.asp?id=1</a>	Winegrape production in Northeast Ohio, especially <i>vinifera</i> varieties	

		Contact Information	Area of Expertise& Assistance Provided	
Name & Address	Phone	Email & Website		
David Marrison, County Extension Director, Associate Professor & Extension Educator, OSU Extension-Ashtabula County 39 Wall Street Jefferson, Ohio 44047	440-576-9008 Ext. 106	E-mail: marrison.2@osu.edu Website: ashtabula.osu.edu	Vineyard and winery economics, estate planning and Extension programs in Northeast Ohio	
Or. Erdal Ozkan Professor & Extension State Specialist, Food, Agric. & Biological Engineering Dept. 590 Woody Hayes Drive Columbus, OH 43210	614-292-3006	E-mail: oxkan.2@osu.edu  Website: http://fabe.osu.edu/our- people/erdal-ozkan	Pesticide application technology; Sprayer calibration	
Patrick Pierquet Dept. Horticulture & Crop Science 130 Gourley Hall – OARDC 1680 Madison Avenue Wooster, OH 44691	330-263-3879	E-mail: patrick_pierquet@hotmail.com	Wine Cellar Master- Micro vinification, sensory evaluation and laboratory analysis	