CFAES OHIO AGRICULTURAL RESEARCH AND DEVELOPMENT CENTER

# Ohio Grape-Wine Electronic Newsletter

**Edited by: Dr. Maria Smith** **March | 2019**

**Photo**: All smiles at the 2019 Winter Grape School held on March 7, 2019 at Silver Crest Cellars in Madison, OH

**IN THIS ISSUE:**



## Is that the sun I see?

Daylight savings and longer days are here. After this joke of April 1 snow in Wooster, warmer temperatures will join in soon. With forecasts for spring-like weather, bud burst will be just weeks away, and that is no joking matter.

As preparations continue for the 2019 season, make sure you're ready to tackle pests and disease that come your way by using the following tips for insect scouting and vineyard sanitation practices!

*-Maria and the V&E Team*

# Insect scouting tips for the vineyard

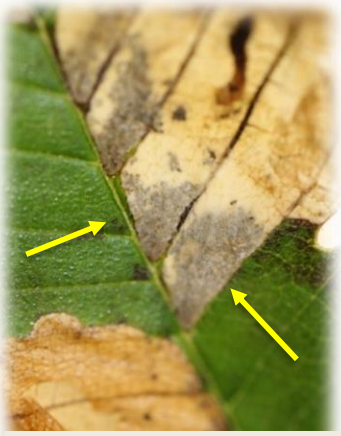
By: Dr. Elizabeth Long, OSU-Entomology and Dr. Maria Smith, OSU-HCS

**Scouting is crucial for OSU experts to properly diagnose an insect pest problem and provide recommendations for control. When it come to insects, know *what*, *where*, and *when* to look for clues!**

1. **Look for *signs* of insects and/or their damage**
2. **Is damage isolated or is it wide-spread throughout the vineyard?**
3. **Did vine *symptoms* appear suddenly or did they build up over time?**
4. **Capture an insect itself or a picture of the insect if you can!**

Look for insect *signs*

Stink bug eggs on leaf surface



Frass (insect waste) in leaves left behind by grape flea beetles

Webbing by grape berry moth caterpillars

Look for vine *symptoms*

Berry bruising by stink bugs

# Insect scouting tips (continued)


Signs of insect infestation, like phylloxera galls (on left), may appear *at the same time* as signs of insect damage by Japanese beetle (on right).

## Tips for capturing a suspected insect pest

- Use a vial or wide-mouthed container with a lid to scoop or sneak up on the pest then freeze it for preservation
- Place a white paper plate under shoots and leaves, then shake out the foliage to see who falls out
- If capturing it live fails, snap a **focused** photo with your phone


***Photo**: Be on the lookout for pests early. You may see the insect itself before the damage appears if you know where to look!*

# Vineyard sanitation following the 2018 season

By: Dr. Maria Smith, OSU-HCS

**The high pest pressure during the warm, rainy 2018 season can be problematic for 2019. Using vineyard sanitation as part of an integrated pest management (IPM) approach now can help reduce new infestations in the coming year.**

Below are a few pests, including diseases and insects, which can, in part, be managed using the physical practice of vineyard sanitation. Sanitation practices refer to the removal of infested tissues from the vine and canopy, retaining disease-free wood for new buds, renewing old cordons containing disease inoculum, and removing and destroying infected material from the vineyard.

***Black rot (Guignardia bidwellii):*** Black rot is a common and highly damaging fungal disease in Ohio grapes. The pycnidia (fruiting bodies) of black rot overwinter in "mummy" berries that remain attached to the cane and/or within tendril and cane lesions. Removing and destroying the mummy clusters, infected tendrils, and canes from the vineyard helps to reduce the available inoculum for the following year (Fig. 1). For more information on black rot, see: https://ohioline.osu.edu/factsheet/plpath-fru-24, https://ohiograpeweb.cfaes.ohio-state.edu/ipm/diseases/black-rot, and the 2019 Midwest Pest Management Guide.


***Figure 1:*** [1] black rot lesions on canes and tendrils, Photos: Bryan Hed. Penn State University (https://psuwineandgrapes.wordpress.com/2017/06/16/2017-summer-disease-management-review/), [2] lesions on shoots, Photo:Dr. Melanie Lewis-Ivey, [3] disease in fruit in multiple stages (A), shriveled and black mummies (B and C), Photos: Dr. Mike Ellis.

# Vineyard sanitation (continued)

***Phomopsis (Phomopsis viticola):*** Phomopsis is a fungal disease that can cause elongated black lesions on young shoots from spores produced in late winter and early spring (Fig. 2). Phomopsis can also infect leaves and berries (https://ohiograpeweb.cfaes.ohio-state.edu/IPM/phomopsis). Previously infected shoots that develop into canes and permanent storage organs such as cordons and trunks harbor Phomopsis pycnidia. In infected wood, Phomopsis can continue to produce new spores indefinitely. Removing and destroying infected canes and replacing old cordons is critical for reducing inoculum and minimizing disease spread. For additional information on Phomopsis, see: https://ohioline.osu.edu/factsheet/plpath-fru-47

***Figure 2:*** Phomopsis lesions on a cane (left, photo: Dr. Mike Ellis), Phomopsis lesions on a young *V. vinifera* shoot (right).

***Grape cane borer (Amphicerus bicaudatus):*** The grape cane borer is a small wood-feeding beetle that infests living canes as shoots begin to harden off in the late summer or early fall. Adults overwinter in the live wood and emerge in early spring. Grape cane borer can be managed by pruning out infested canes and dead wood from the canopy during dormant pruning. The affected wood should be removed from the vineyard and destroyed. For additional information on the biology, signs, and control of the grape cane borer, see: https://ecommons.cornell.edu/bitstream/handle/1813/43097/grape-cane-borer-FS-NYSIPM.pdf?sequence=1&isAllowed=y

***Figure 3:*** Grape cane borer in an infested cane. Photo: Cornell University

**While vineyard sanitation is an important component of a disease management program, it alone is insufficient for disease and insect control. Please consult the 2019 Midwest Pest Management Guide (https://ag.purdue.edu/hla/hort/documents/id-465.pdf) for comprehensive pest management guidelines.**

THE OHIO STATE UNIVERSITY
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