

## UNDERSTANDING SMOKE TAIN

(Wesley F. Zandberg, UBCO, *J. Agric. Food Chem.*)

Researchers and vintners around the world are increasing focus on understanding smoke taint and investigating ways to evaluate its risks. Kathy Malone, Chair of the BC Wine Grape Council (BCWGC) says smoke taint has been identified by the industry members of the BCWGC R&D Committee as a high priority research subject.

"The BC Wine Grape Council has funded research at the University of British Columbia Okanagan to develop methods to identify regionally-specific molecules involved in smoke residues. This will allow producers to predict the degree of smoke taint in wine from the chemical composition of smoke-exposed berries, thus enabling them to minimize economic and quality impacts of smoke exposure. We feel this work has significantly contributed to the body of knowledge concerning the chemistry of smoke taint in wine."

### Here's what we know from the study (Wesley F. Zandberg, UBCO, *J. Agric. Food Chem.*):

1. The presence of ash on the berries does not guarantee you will have smoke-taint. Nor does the absence of ash mean you won't have smoke taint.
2. Washing the berries after smoke-exposure (via overhead irrigation) will not decrease the risk of smoke-taint.
3. Testing for smoke-taint marker compounds can be done immediately after smoke exposure, rather than waiting until close to commercial maturity.
4. Supra Research and Development, southeast Kelowna, provides testing of berries and wines for smoke taint marker compounds.
5. There is no evidence of carry-over effects in the vine from year-to-year (i.e., you can't taste last year's taint in the grapes).
6. Evidence from the study suggests that smoke taint presents itself in a regional fashion: both the levels of volatile phenols and the way in which they are biochemically transformed/ stored within grapes appears to vary from region to region. It has been recommended that this variance be catalogued over several growing seasons.

"What we have found from experience and literature is that smoke taint in wine arises from very close exposure of vines to wildfire at very specific stages in berry development. Currently we do not expect to see significant impact from the 2018 wildfires." –Kathy Malone, Chair of the BCWGC.

To review the full research study, [click here.](#)

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## SHARE IMPORTANT INFORMATION WITH YOUR STAFF

It's too early to know whether the wildfires will impact the vintage, so it's important to remain optimistic and factual when speaking with media and guests.

Tasting room staff should avoid speaking about smoke taint with guests if they are not informed. If a tasting room staff is asked about smoke taint, it is important for them to understand what it is, and have a few key messages to share.

### KEY MESSAGES:

- Smokey notes in a wine is not the same thing as smoke taint
- Smoke taint in wine arises from very close exposure of vines to wildfire at very specific stages in berry development
- Currently we do not expect to see significant impact from the 2018 wildfires
- There is no evidence of carry-over effects in the grapevine from year to year
- Researchers and vintners around the world are increasing focus on understanding smoke taint and investigating ways to prevent it

Media calls relating to the wildfires can be directed to the BC Wine Institute.

For go-to technical information on volatile phenols in grape berries and wine after on-vine exposure to smoke, [click here.](#)

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