

Protocols for vineyard managers to minimise smoke taint from prescribed burns

AGRICULTURE VICTORIA



The optimum time for prescribed burning is in late summer or early autumn. This coincides with key berry development phases when many grape varieties are most susceptible to the absorption of smoke taint. Prescribed burning in winter or spring will reduce the impact on wine production but these burns are less effective and more expensive due to damp undergrowth and low ambient temperatures.

The following protocols aim to provide advice to vineyard managers on how to reduce the risk of berries absorbing smoke from prescribed burns and how to minimize smoke taint compounds in wine.

- Advise local and regional FFMVic and CFA fire management staff of your location, your enterprise, varieties (early and late ripening), anticipated harvest dates, size and contact details. This can be done as an individual or as a regional industry group.
- Conduct a twice-yearly meeting to discuss the current Joint Fuel Management Program (JFMP) for your region (see <https://www.ffm.vic.gov.au/bushfire-fuel-and-risk-management/joint-fuel-management-program>). The JFMP covers the next 3 years of burns to take place. Information can be given to fire managers to allow planning to take into account any burns near your location.
- Use the Planned Burns Victoria System on the FFMVic website (see <https://plannedburns.ffm.vic.gov.au/>) to determine when burns are planned and if necessary to set up automatic notification about timing of specific burns.

- Update local and regional FFMVic fire management staff prior to and during harvest to give fire managers the opportunity to burn in other areas or to undertake extra burns in your area due to an early harvest.
- Measure smoke density, timing, duration and composition to determine the risk of berries absorbing smoke taint compounds (see DJPR fact sheet “Measuring smoke intensity and smoke composition in vineyards”). The risk of smoke taint absorption by berries varies during the season (see DJPR fact sheet “Smoke taint risk and management in vineyards”).
- Test grapes for smoke taint compounds at an accredited laboratory within two weeks of harvest, such as the Australian Wine Research Institute or Vintessentials. Visit www.awri.com.au or <https://www.vintessential.com.au/> for guidelines for assessing vineyards and grapes for smoke taint.
- Minimise the risk during the winemaking process of contamination with smoke taint compounds in leaf and woody tissue by hand harvesting and reducing Matter Other than Grapes (MOG) in the ferment.
- Minimise skin contact time in the fermentation and implement early press cutoff to reduce the extraction of smoke compounds from skins.
- Conduct a mini bench top ferment of smoke affected grapes to produce a small-scale wine when particularly concerned. Send grape and wine sample to the Australian Wine Research Institute or Vintessentials for analysis and interpretation.
- There is evidence that the perception of taint may increase during storage, so it may be wise to market smoke affected wines for earlier consumption.

ACCESSIBILITY

For more information see factsheets at <http://www.hin.com.au/current-initiatives/smoke-taint-research> or contact Agriculture Victoria Research on 136186 or Ian Porter at La Trobe University on i.porter@latrobe.edu.au, 1300 528 762

