



Smoke taint remains a threat to the long-term economic viability of the wine industry. The occurrence of bushfires in or near wine regions is increasing. So too are the revenue losses incurred by grape and wine producers, where vineyard smoke exposure renders wine unsaleable due to unpalatable smoky and ashy characters.

The number of vineyards exposed to smoke during the 2019-2020 bushfire season was unprecedented, with thousands of grape samples across Australia tested for smoke exposure. Faced with the prospect of producing wine from smoke-exposed fruit, producers needed answers to a number of key questions:

- What level of smoke exposure produces 'smoke taint' in wines?
- Can pre-veraison smoke exposure produce tainted wines?
- Are all varieties the same, or can some varieties tolerate more smoke exposure?
- Which strategies for predicting, mitigating and responding to risk associated with vineyard smoke exposure actually work and are scientifically proven?
- Can grapes in the 'grey zone' produce acceptable wines for commercial styles?
- Can judicious pressing and limited skin contact recover value?
- And how do consumers respond to smoke-affected wines?

Researchers from The Australian Wine Research Institute, The University of Adelaide and Charles Sturt University present answers to these questions, based on carefully designed research studies. Wines made as part of the studies will be presented for tasting, as well as reference standards of smoke compounds – both volatile phenols and phenolic glycosides. Learn from the latest research so you are better prepared for the next prescribed burn or bushfire event.

Time	Agenda	Presenter
08:45 – 09:00	Registration	
09:00 – 10:00	New research from CSU <ul style="list-style-type: none"> • Can grapes in the ‘grey zone’ produce acceptable wines for commercial styles? • Can judicious pressing and limited skin contact recover value? • Sensory evaluation of eight wines 	Prof. Leigh Schmidtke (CSU)
10:00 – 10:20	Short break	
10:20 – 11:10	New research from AWRI <ul style="list-style-type: none"> • Can pre-veraison smoke exposure produce tainted wines? • What level of smoke exposure produces ‘smoke taint’ in wines? • Are all varieties the same, or can some varieties tolerate more smoke exposure? • How do consumers respond to smoke-affected wines? 	Adrian Coulter (AWRI)
11:10 – 11:40	Coffee break	
11:40 – 13:10	New research from University of Adelaide <ul style="list-style-type: none"> • On-site sensors for real-time monitoring of vineyard smoke exposure • Mitigation and remediation of smoke taint, including: <ul style="list-style-type: none"> ◦ In the vineyard: protective coverings to prevent grapes from exposure to smoke ◦ In the winery: ozonation, novel adsorbents, ultra-filtration, spinning cone distillation, distillation • Sensory evaluation of eight wines 	Prof. Kerry Wilkinson (University of Adelaide)
13:10 – 14:00	Lunch	

Participants: This interactive workshop is suited to winemakers and growers who want to find out the latest information about smoke exposure and smoke taint.

Canberra

Tuesday, 25 July
8:45am – 2:00pm

Lake George Winery
Federal Hwy,
Lake George NSW 2581

Cost: \$70 per person, inc. GST

Yarra Valley

Wednesday, 26 July
8:45am – 2:00pm

Hubert’s Estate
1-3 St Huberts Rd, Coldstream
VIC 3770

Cost: \$100 per person, inc. GST

Adelaide Hills

Thursday, 27 July
8:45am – 2:00pm

Goldings Wines
52 Western Branch Rd,
Lobethal SA 5241

Cost: \$70 per person, inc. GST

Booking is essential

REGISTER HERE

Presenters



Adrian Coulter - Senior Oenologist, AWRI

Adrian has worked at the AWRI helping to solve Australian winemakers' technical problems for more than 33 years. He started in the wine industry during vintage 1980, working full-time in a medium-sized winery in SA. Adrian later attended Flinders University, working vintages as a cellar hand during his holidays, and graduated with a BSc (Chemistry) degree in 1988. He commenced working at the AWRI in January 1989 and obtained a Grad. Dip. (Oenology) from The University of Adelaide in 2000. During his career, he has investigated a vast range of technical problems, from simple crystalline deposits to complex sensory issues requiring identification of potent taint compounds in conjunction with AWRI's researchers. Adrian had been involved with the AWRI's smoke taint research since smoke taint first appeared on the radar in 2003.



Prof. Leigh Schmidtke – Director, National Wine and Grape Industry Centre, Charles Sturt University

Leigh is a Professor of Oenology and was the Director of the National Wine and Grape Industry Centre from 2016, and Graham Centre for Agricultural Innovation from 2019 until the launch of the Gulbali Institute at Charles Sturt University in 2022. He has an extensive background in analytical chemistry relating to grape and wine analysis, wine production systems and wine microbiology. Chemometrics and metabolomics are features of Leigh's research and collaborations. Complex data analysis, metabolomics, rapid methods of assessment using IR and mass spectrometry methods for determining the impact of abiotic and biotic factors upon grapevine and plant performance, berry composition and wine style are some of his research interests. He collaborates widely to seek better understanding of the natural world through careful experimental design, rigorous analytical measures of composition, sensory evaluation and statistical modelling.



Kerry Wilkinson - Professor of Oenology, University of Adelaide

Professor Kerry Wilkinson is an engaging wine educator and world-renowned wine scientist in the School of Agriculture, Food and Wine at the University of Adelaide. She teaches in the Bachelor of Viticulture and Oenology and Master of Wine Business, and led the development of the award-winning, online Wine101x course. She also leads a productive wine science research group. Her primary research interests concern the flavour chemistry of grapes and wine: from management of 'green' characters in the vineyard and improved methods of oak maturation in the winery, to consumer preferences for different styles of sparkling wine and the evaluation of novel technologies for efficient winemaking. However, she is best known for her research into the impact of bushfire smoke on grapes and wine.

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Research funders:



Regional partners:

