

ACE workshop – McLaren Vale

In the mid 2010s, a new maceration approach was developed in Tasmania to address issues with low colour and tannin in Pinot Noir. This technique was termed 'ACE', an acronym for 'accentuated cut edges'. The idea behind the technique is that the grape skins are gently cut into smaller fragments, extracting more phenolics, but not damaging the grape seeds. Researchers from AWRI and the University of Adelaide recently teamed up with Coriole to trial the maceration accelerator and found some remarkable effects, not only on wine phenolics, but also on aroma, flavour and texture. The technique can be used to build colour and texture in red wines and can enhance the aroma and flavour of white wines. This workshop will provide an introduction to the ACE technique and describe how to get the most out of this maceration approach based on the research results. This will include tastings of red and white wines to showcase the technique's impact.

| Time | Agenda | Presenter |
|----------|---|--|
| 9:30 am | Welcome and housekeeping | Keren Bindon, AWRI |
| 9:40 am | ACE: from concept to application | Keren Bindon, AWRI Duncan Lloyd, Coriole Wines |
| 10:00 am | Q&A | |
| 10:05 am | How to use ACE and yeast selection to craft a tropical Sauvignon Blanc | Xingchen Wang, The University of Adelaide David Jeffery, The University of Adelaide |
| 10:25 am | Q&A and tasting | |
| 10:40 am | Don't let water ruin the wine: building texture back into water-added reds with ACE | Keren Bindon, AWRI Sue Bastian, The University of Adelaide Duncan Lloyd, Coriole Wines |
| 11:10 am | Q&A and tasting | |
| 11:25 am | Can I make a better wine out of low-phenolic fruit with ACE? | Keren Bindon, AWRI |
| 11:45 am | Q&A and tasting | |
| 12:00 pm | Close | Keren Bindon, AWRI |

This workshop is funded by the Australian Wine Research Institute.

ACE Workshop McLaren Vale - 2022

Date: Tuesday, 15 November 2022

Time: 9.30am - 12.00pm

Location: McLaren Vale Visitor Centre

796 Main Road
McLaren Vale, SA 5171

Cost: \$60 per person, including GST

Presenters

Keren Bindon, Research Manager, AWRI



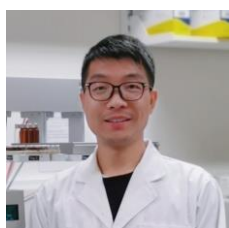
Keren has a background in biology and plant physiology, and graduated with a PhD in viticulture from the University of Adelaide in 2004. She went on to lecture in viticulture and oenology at the University of Stellenbosch, South Africa until 2008, when she joined the AWRI. Over her career she has specialised in understanding the grape to wine interface, with a particular focus on factors affecting the extraction and conversion of key compounds from grapes. Over the last decade, she has participated in winemaking trials which apply traditional and novel maceration techniques, to understand the impacts on wine style - from grape to glass. She has a strong interest in contextualising research to provide meaningful outcomes to the grape and wine industry, and regularly participates in extension activities.

Duncan Lloyd, Senior Winemaker, Coriole



Duncan Lloyd grew up amongst the vines of the family vineyard, which has instilled in him a deep passion for both winegrowing and their home site. He studied winemaking at the University of Adelaide, graduating in 2008. He then set out to broaden his horizons in Europe, working in Germany, Italy and France from 2009 to 2011, including stints at Tuscan estate Monteverro and the Southern Rhône's esteemed Vieux Télégraphe. He believes that variety and vineyard site are his greatest tools, and follows an experimental approach in his winemaking. By producing around 100 unique batches each year he aims to create diverse options to use during blending. As part of this strategy, he has begun to use the DTMA approach to achieve specific styles. He loves to work with the same fruit each year, slowly tailoring Coriole's viticulture and winemaking decisions to build on the successes and failures from previous decisions.

Xingchen Wang, Researcher, The University of Adelaide



Xingchen obtained his Bachelor and Master degrees in Viticulture and Oenology at the Northwest A & F University (China), where he investigated the effect of mixed use of isolated non-Saccharomyces yeasts and commercial yeasts in white and red wine fermentation on the chemical and sensory aroma profiles. He started his PhD (from 2018) in wine chemistry at the University of Adelaide (UA) where he was trained in wine aroma chemistry with the principal supervision of Associate Professor David Jeffery and co-supervision by Dr Dimitra Capone (UA) and Dr Aurélie Roland (l'Institut Agro Montpellier, France). During his PhD candidature, he has been working on a Wine Australia funded project that aims to further the understanding of varietal thiols and their precursors in grape and wine and to explore the potential of different winemaking practices for the improvement of varietal thiols in wine. Currently, Xingchen has submitted his PhD thesis for examination and currently is engaging in the analysis of chemical volatile profiles of different beverages, including beer/wort, wine, and vinegar.

David Jeffery, Associate Professor, The University of Adelaide

David is Associate Professor in Wine Science at the University of Adelaide. After training and working as a chef for a number of years, he followed his passion for science and completed a PhD in Organic Chemistry at Flinders University. This qualification led to employment at the AWRI, where David received a solid grounding in the science of grapes and wines, paving the way for his current role. He teaches a range of wine science courses and a distillation short course that is open to the public. His research concerns the aroma, flavour and phenolic compounds that influence wine quality. David has published dozens of papers related to wine chemistry, co-authored a book chapter on wine in *The Oxford Handbook of Food Fermentations* with colleague Kerry Wilkinson, and published a textbook called *Understanding Wine Chemistry* with two renowned professors from the US.

Susan Bastian, Associate Professor, The University of Adelaide

Susan gained a BSc (Hons), PhD in Biochemistry and Postgraduate Diploma in Oenology at The University of Adelaide and is Associate Professor in Oenology and Sensory studies as well as manager of the Sensory Research Facility at the University of Adelaide. She has 17 years of experience in wine and food flavour, quality, sensory and consumer research and is currently researching objective markers of grape and wine quality; grape composition and wine style; berry sensory assessment; alternative grape varieties; oak flavour; vegetable protein fining agents; wine regionality/terroir and authenticity; wine and food consumer preference/emotions; artificial intelligence and consumer insights; context effects and virtual reality; genomics of perception of mouthfeel in beer and wine; cross-modal interactions; traditional Chinese medicine and value-adding grape marc for health; flavoured wine products; improved sensory and consumer methods; and sensory and wine marketing.