

AUSTRALIAN JOURNAL OF  
**Grape and Wine Research**

PUBLICATION OF THE AUSTRALIAN SOCIETY OF VITICULTURE AND OENOLOGY



Large scale, open-top heating system for measuring vine, berry and wine responses to elevated temperature under realistic vineyards conditions.

## Contents

### Review Article

- Oenological tannins: a review \_\_\_\_\_ 1  
*A. Versari, W. du Toit and G.P. Parpinello*

### Original Article

- Contribution of oak wood ageing to the sweet perception of dry wines \_\_\_\_\_ 11  
*A. Marchal, A. Pons, V. Lavigne and D. Dubourdieu*

### Short Research Paper

- Wireless real-time monitoring of malolactic fermentation in wine barrels: the Wireless Sensor Bung system \_\_\_\_\_ 20  
*S.F. Di Gennaro, A. Matese, J. Primicerio, L. Genesis, F. Sabatini, S. Di Blasi and F.P. Vaccari*

### Original Articles

- Effect of extended maceration and ethanol concentration on the extraction and evolution of phenolics, colour components and sensory attributes of Merlot wines \_\_\_\_\_ 25  
*L. Federico Casassa, C.W. Beaver, M.S. Mireles and J.F. Harbertson*

- Yeast populations associated with grapes during withering and their fate during alcoholic fermentation of high-sugar must \_\_\_\_\_ 40  
*K. Rantsiou, S. Campolongo, V. Alessandria, L. Rolle, F. Torchio and L. Cocolin*

- White wine fermentation: interaction of assimilable nitrogen and grape solids \_\_\_\_\_ 47  
*E. Casalta, M.F. Cervi, J.M. Salmon and J.M. Sablayrolles*

- Identification of behaviour patterns of viticultural regions according to their agroclimatic fingerprint and grape characteristics \_\_\_\_\_ 53  
*M.R. González-Centeno, S. Simal, A. Femenia, M. Frau and C. Rosselló*

- Ultraviolet/visible/near-infrared spectral analysis and chemometric tools for the discrimination of wines between subzones inside a controlled designation of origin: a case study of Rías Baixas \_\_\_\_\_ 62  
*M.J. Martelo-Vidal, F. Domínguez-Agis and M. Vázquez*

- Optimisation of techniques for quantification of *Botrytis cinerea* in grape berries and receptacles by quantitative polymerase chain reaction \_\_\_\_\_ 68  
*S. Saito, K.J. Dunne, K.J. Evans, K. Barry, L. Cadle-Davidson and W.F. Wilcox*

## Short Research Paper

- The reliability of woody indexing for detection of grapevine virus-associated diseases in three different climatic conditions in Australia \_\_\_\_\_ 74  
*F.E. Constable, J. Connellan, P. Nicholas and B.C. Rodoni*

## Original Articles

- Influence of temperature, copper and CO<sub>2</sub> on spore counts and geosmin production by *Penicillium expansum* \_\_\_\_\_ 81  
*D. Judet-Correia, M. Bensoussan, C. Charpentier and P. Dantigny*
- Effect of elevated temperature on the onset and rate of mesocarp cell death in berries of Shiraz and Chardonnay and its relationship with berry shrivel \_\_\_\_\_ 87  
*M. Bonada, V.O. Sadras and S. Fuentes*
- Effects of elevated temperature in grapevine. I Berry sensory traits \_\_\_\_\_ 95  
*V.O. Sadras, M.A. Moran and M. Bonada*
- Effects of elevated temperature in grapevine. II juice pH, titratable acidity and wine sensory attributes \_\_\_\_\_ 107  
*V.O. Sadras, P.R. Petrie and M.A. Moran*
- Comparison of different protocols for indirect measurement of leaf area index with ceptometers in vertically trained vineyards \_\_\_\_\_ 116  
*R. López-Lozano and M.A. Casterad*

## Short Research Paper

- Has soil drying contributed to earlier grape ripening in wine regions of southern Australia? \_\_\_\_\_ 123  
*R.E. White*