

Rocco Longo¹; Angela Merry¹; Bob Dambergs^{1,2}; Gemma Lewis³, Hanna Westmore¹ and Fiona Kerslake¹
¹Horticulture Centre, Tasmanian Institute of Agriculture, Prospect, Tasmania
²WineTQ, Monash, South Australia
³Tasmanian School of Business and Economics, University of Tasmania, Newnham, Tasmania

Introduction

- Pinot Noir (PN) is the 4th most crushed red variety in Australia (~53,000 tonnes in 2018).
- PN is the 2nd most listed red wine in Australia (17.9%).
- Anecdotal knowledge exists that different styles of Pinot Noir exist among Australian wine regions.
- >50 benchmark PN wines from Australian single-vineyards were sourced from the 2015 and 2016 vintages.
- 15 benchmark PN wines from five prominent international regions.

Aims

- To characterise Australian PN producing regions by phenolic and colour profiling.
- Aromatic volatile characterisation of a subset of 25 Australian and 15 International wines
- To correlate cultural practices and environmental factors to chemical data.

Results

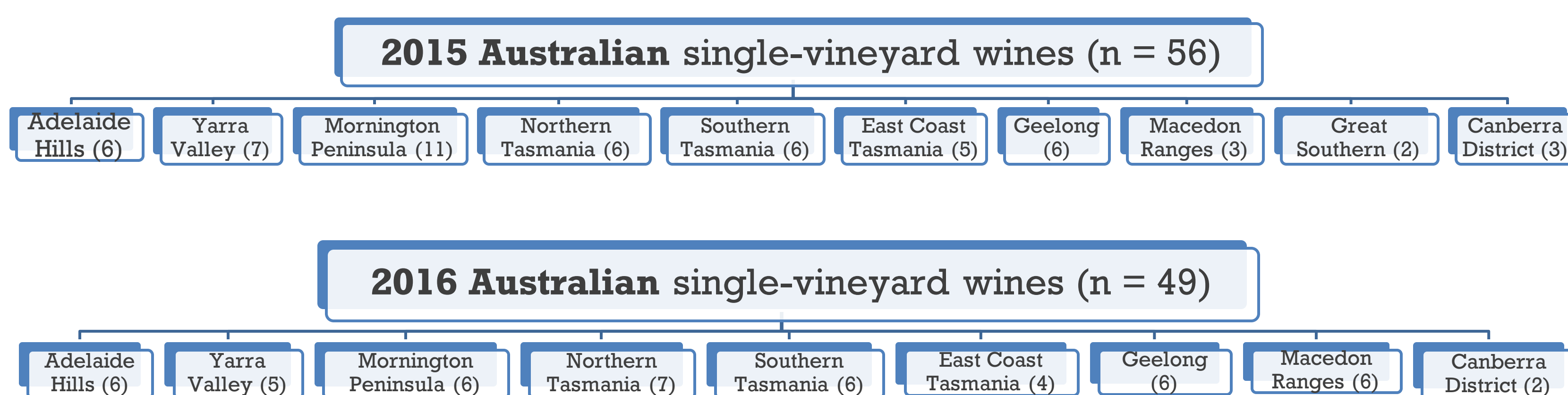


Figure 1a. Australian Pinot Noir wines for phenolic and colour profiling.

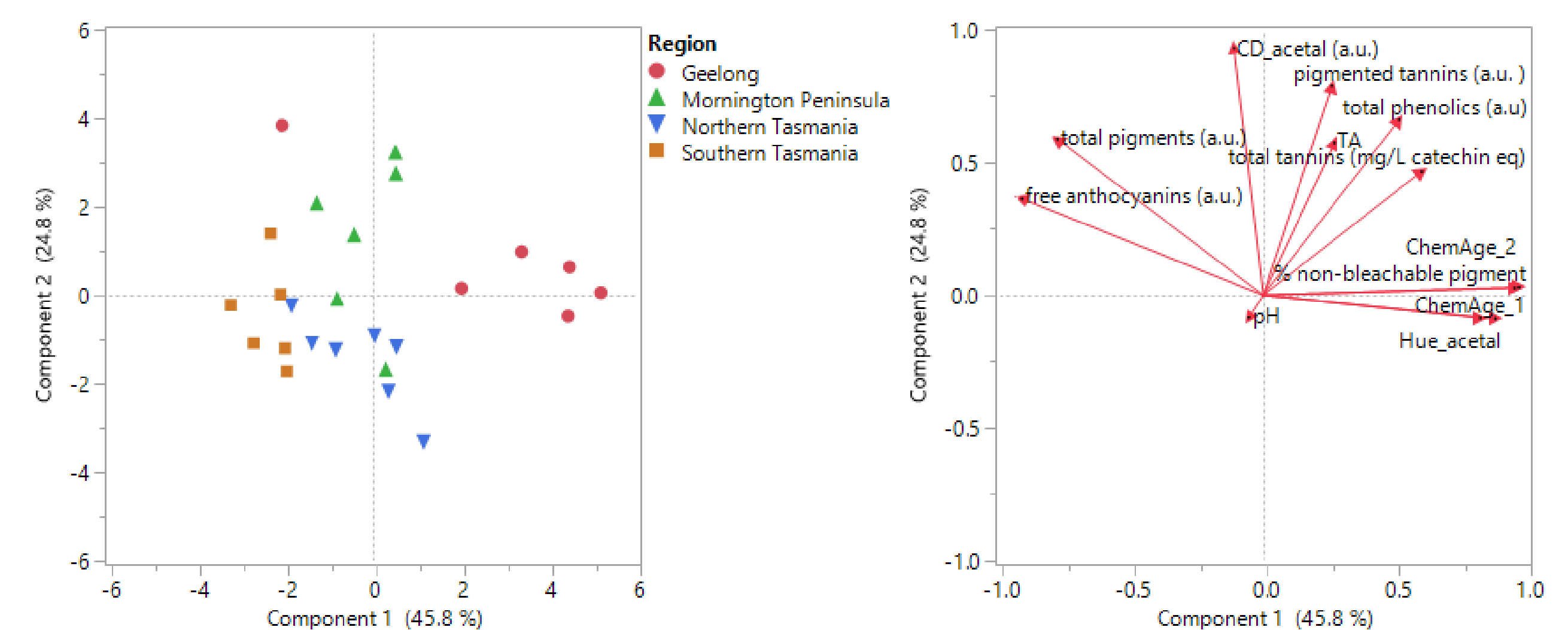


Figure 1b. Example of principal component analysis of 2016 Pinot Noir wines and phenolic and colour attributes.



Figure 2a. International and Australian Pinot Noir wines for aromatic volatile characterisation.

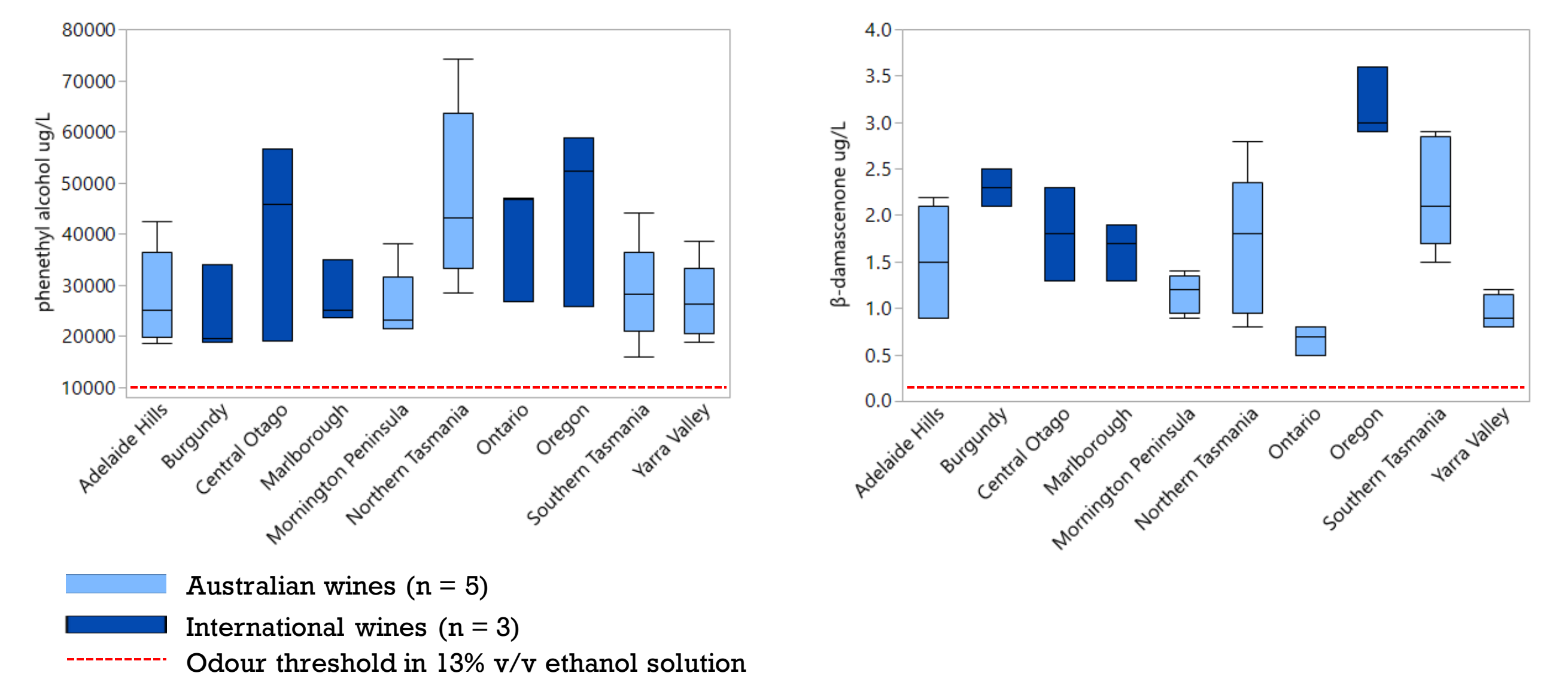


Figure 2b. Examples of trends in the concentration of phenethyl alcohol and β -damascenone for 2015 Pinot Noir wines

Conclusions

- Pinot Noir wines from different regions of origin can be discriminated based on their phenolic/colour and aroma attributes.
- Further work will aim to identify soil, climate, viticultural and/or winemaking influences driving regionality.