Comparison of tannin and pigment outcomes in Pinot noir wine from eight maceration techniques

AL Carew¹, A Sparrow¹, R Dambergs¹,²

¹ Tasmanian Institute of Agricultural Research, Hobart, Tasmania
²The Australian Wine Research Institute
Corresponding author: anna.carew@utas.edu.au

Poster Abstract

Pinot noir vinification offers winemakers the challenge of extracting adequate colour from skins, and sufficient tannin for colour stabilisation and balanced mouthfeel. A range of maceration techniques are currently used by Pinot noir winemakers to optimise colour and tannin extraction, and contribute precursors for yeast-mediated aroma compounds. We report on an evaluation of eight maceration techniques for Pinot noir winemaking. Six of the techniques evaluated are widely used (crush and destem, 4°C cold soak, dry ice maceration, enzyme addition, high sulphite addition, extended maceration), one technique has particular relevance to wine research (freeze and thaw) and one is novel (microwave assisted maceration). Strains were trialled using 1L submerged cap microvinification, and tannin and pigment effects were evaluated in-train and after cold settling using mid-range UV spectrophotometry. The findings will be presented, along with primary fermentation kinetics for each treatment. The data presented will be for work-in-progress and the authors will comment on findings in terms of their implications for industry use of various maceration approaches, and the value of this study as a basis for further research.