Influence of skin maceration & seed removal on wine composition of pinot noir

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Poster Abstract

In wine made from pinot noir grapes, skin components are thought to make a superior contribution to wine quality than do the seed components. When skin cells are ruptured, compounds contained within the cells can move more readily into the wine matrix. The investigation assessed whether increasing the perimeter of grape skin edges per unit surface area, and removal of seeds during fermentation, would enhance the phenolic contribution from the skins. Wines were made from Pinot noir grapes using a 1kg submerged cap micro-vinification technique in which the grape must was subjected to physical maceration early in the fermentation process. The influence of macerating the must on Day 3 of fermentation in the presence or absence of seeds was assessed by daily sampling during the fermentation period and again at racking and bottling. Phenolic composition of the samples was determined using spectral analysis. Results show a substantial increase in total phenolics, tannin, and pigmented tannin in treatments where skins were macerated. A further trial in which berries were either crushed or macerated prior to inoculation showed similar results.