

to press the fruit. Winemakers typically consider free-run and lightly pressed juice as the premium quality and will make wines separately from different press fractions. Laboratory scale and winery scale experiments were undertaken to investigate the impact of skin contact time and pressing on the release into juice of a range of volatile and non-volatile components of the fruit.

Key results from this year

In a commercial winery operation, 3MH-S-cysteine concentrations in juice fractions increased significantly when the press was operating as a higher pressure. The increase was attributed to the cumulative effect of longer skin contact time and the pressure used for the pressing. Experiments conducted to study the effect of skin contact and pressing pressure in the laboratory did not show clear trends. This was attributed to the small sample size. However, there was a general trend of increases in 3MH-S-cysteine concentration in must with skin contact.

Among the clones of sauvignon blanc investigated in this study, namely Mass select, BDX 316 and BDX 317, initial observations suggest that must of grapes from the Mass select clone has higher levels of 3MH-S-cysteine.

Publications

Maggu M. 2006. Implementation of a laboratory method for the quantification of thiol precursors present in *Vitis vinifera* cv. sauvignon blanc must. M.Sc. thesis, Auckland University.

Key funding sources and collaborating companies

- Auckland University
- Marlborough Wine Research Centre

Key staff involved

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Project: Influence of fruit processing on the thiol content of sauvignon blanc juice

Background

The release into the juice of volatile and non-volatile components in grapes is influenced by factors in the winery such as skin contact time and the pressure used

