

Combined effects of sulfur dioxide, glutathione and light exposure on the conservation of bottled Sauvignon blanc

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Abstract

Oxygen exposure may trigger a series of changes that could be detrimental to the quality white wines. This study evaluated the combined effects of sulfur dioxide, glutathione and light exposure on the chemistry and sensory perception of bottled Sauvignon blanc. The wines were manually bottled into clear bottles, closed with low oxygen transfer rate stoppers, and stored for three months, either exposed or protected from light. The wines exposed to artificial light showed higher rates of sulfite loss and oxygen consumption, were significantly darker in color, exhibited significant changes in the concentration of phenolics and volatile compounds, were perceived as less fruity/floral, and had higher nuances of solvent, earthy and honey aromas than the ones protected from light. The treatments with higher amounts of initial sulfites and glutathione were able to delay some of these changes but were less significant than protecting the wines from artificial light.

Author keywords

Antioxidants
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Storage
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