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Título artículo: Saturation of grape musts with CO2: A technique to reduce the use of SO2 in white wines

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RESUMEN:
The purpose of this work was to study the possibility of partially or totally replacing the use of SO_2 during white wine elaboration by using saturation of grape musts with CO_2 at the prefermentative stage. No differences were observed in main oenological parameters between wines from musts with and without CO_2. Wines from musts with and without CO_2 were submitted to an accelerated oxidation test that showed small changes in their browning capacity, without technological significance. Regarding volatile composition, the saturation of must with CO2 and the corresponding SO2 dose reduction resulted in fruit- and floral-driven wines that contribute most to the aromatic character of white wines. The sensory analysis of wines was carried out by Napping (R), showing results in accordance with the volatile composition. After 12 months of bottling, wines were stable against acetic bacteria but the absence of SO2 led to the development of malolactic fermentation in the bottle. On the basis of the current study's results, it could be suggested that this technique may be a feasible alternative that contributes to the reduction of the use SO2 doses in wines, achieving stable wines over 12 months and showing a distinctive aromatic profile.

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