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TOASTED VINE-SHOOT CHIPS AS ENOLOGICAL ADDITIVE

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ABSTRACT

Different ways of vine-shoots revalorization have been proposed, but not in wine yet, as for example in the same way as oak chips are being used. In this work, vine-shoot samples were submitted to a thermogravimetric analysis to establish the temperature range for its lignin structure decomposition, resulting between 160 and 180 °C. Then, vine-shoot chips from Airén and Cencibel cultivars, with a particle size around 2.5-3.5 cm, were submitted to six toasting conditions: 160 °C and 180 °C for 45, 60 and 75 minutes. Their volatile composition was very similar to oak chips, being vanillin the most important compound. Moreover, such vine-shoots have an interesting content of prodelphinidins that together with the stilbenes may contribute to wine antioxidant activity. The toasting conditions at 180°C/45 min were the most suitable one for releasing the mentioned valuable compounds in order to propose vine-shoots as new enological additive similar to oak chips.

KEYWORDS: chips, phenolic compounds, tannins, toasted, volatile compounds, vine-shoots

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