Effect of vine-shoots toasting on the generation of high added value volatiles

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Abstract: This paper shows the volatile composition changes of two vine-shoots cultivars (a neutral, Airén, and an aromatic, Moscatel) when are subjected to different toasting treatments: light (180 °C for 15 min), medium (180 °C for 30 min) and high (180 °C for 45 min). The vine-shoots volatile profile for both vine-shoots varieties was determined by HS-SBSE-GC/MS and compared with those of the oak wood used as reference. Results indicated that the higher the toasting, the greater the increment of most wood and varietal volatiles. The vine-shoots wood volatile composition was similar to the oak one, which is known to be very valuable in case of oak aged wines. The volatiles responsible for a varietal contribution were interesting in both vine-shoots, especially the well-known Moscatel particular aroma that showed up at medium toasting. These results suggest the potential exploitation of vine-shoots to be used with oenological purposes for their high added volatile contribution. Copyright © 2016 John Wiley & Sons, Ltd.

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