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Genotypic variation in phenolic composition of novel white grape genotypes (*Vitis vinifera* L.)

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RESUMEN:

Targeted analysis based on high performance liquid chromatography coupled to diode array detection and electrospray ionization tandem mass spectrometry (HPLC-DAD-ESI-MS/MS) has been applied to determine genotypic effect in the phenolic composition of novel white grapes (Vitis vinifera L.). For this purpose, the recently identified white grape genotypes Albillo Dorado and Montonera del Casar were comprehensively profiled and compared to cultivar Airén at two consecutive years (2016 and 2017). Several phenolic compounds were quantified in berry parts and arranged into the following classes: flavonols, flavan-3-ols, hydroxycinnamic acid derivatives and stilbenes. In order to establish the degree of dissimilarity between grape genotypes, data obtained were subjected to statistical analysis included a Principal Component Analysis that provided a good separation according to flavonols, hydroxycinnamic acid derivates and flavan-3-ols from different grape tissues. The approach reported here may serve to clarify the varietal typicity of these new white grape genotypes for producers and consumers, defining their identity and position on the market.

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