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Mono- and di-glucoside anthocyanins extraction in mould resistant varieties

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Anthocyanins extracted from red grape skins during maceration are the principal compounds responsible for red wine colour and its stability, depending on their composition and concentration [1]. For instance, colour stability increases with the degree of methylation, glycosylation and acylation of the basic anthocyanin moiety. Grape varieties of *Vitis vinifera* generally lack in diglucoside pigments, that are, on the contrary, greatly present in many mould resistant red grape varieties [2].

In this work, the anthocyanic profile of a mould resistant variety -Cabernet Carbon- grown in two different experimental plots in Trentino (North Italy) has been investigated during 2017 harvest. The focus was on the mono- and di-glycosides anthocyanin extraction during alcoholic fermentation.

The separation and quantification of mono- and di-glucoside anthocyanic forms (non-esterified, acetylated and *p*-coumarated) in a single chromatographic run has been possible optimizing the HPLC-DAD method previously proposed by Castia et al. [3].

During the maceration, the concentration of malvidin 3,5-diglucoside, the most present anthocyanic form, reaches its maximum later if compared with the corresponding 3-glucoside form and then decreasing slower. The data confirm those obtained during 2016 harvest for a wider number of mould resistant varieties [4].

References

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