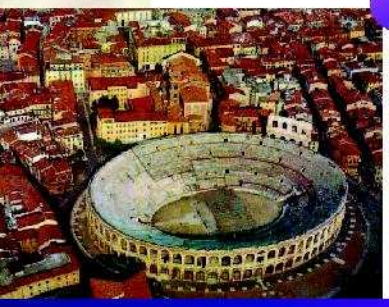
UNIVERSITÀ di VERONA
Dipartimento di BIOTECNOLOGIE

ISHS

X INTERNATIONAL SYMPOSIUM ON GRAPEVINE PHYSIOLOGY AND BIOTECHNOLOGY




BOOK OF ABSTRACTS

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Withering grape metabolomics: dehydration on-vine vs warehouse

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Grape withering is an oenological process used for production of important reinforced and sweet Italian wines, e.g. Amarone di Valpolicella (produced by Corvina, Corvinone and Rondinella grape), Passito di Pantelleria (Zibibbo), VinSanto (Malvasia and Trebbiano), Sfursat (Nebbiolo), Raboso Passito, … [1]. Traditionally, dehydration is carried out by keeping the grape in closed environments in order to have strict control of the process. Alternatively, it is carried out on-vine by cutting the fruit cane before the harvest, but in this case the scientific literature has not widely focused yet. In this study the two withering processes were compared. Grape samples at different dehydration stages (0-30%) were collected and their metabolic profile was studied by high-resolution mass spectrometry (HR-MS) by using the method previously proposed [2]. In particular, the study was focalized on the main classes of polyphenolic compounds which determine the organoleptic and nutraceutical proprieties of grapes and wines, such as anthocyanins, flavonols, dihydroflavonols, flavanones and stilbene derivatives [3,4].

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