

STUDY ON THE IMPACT OF CLONE ON THE VARIETAL AROMA OF XINOMAVRO

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Abstract:

Context and purpose of the study: It is well documented that varietal aroma is an important parameter of wine quality. Chemical compounds responsible for wine varietal aroma are sourced from secondary grape metabolites. Until today little research is conducted on the influence of vine clone on the grape aromatic content of Greek grape varieties. Xinomavro (*Vitis vinifera* L.) is one of the most important Greek grape varieties, valuable for the wine industry of Northern Greece since it contributes to the production of PDO wine of Naoussa, Amindeo and Goumenissa.

Material and methods: In this study we determined by gas chromatography/mass spectrometry (GC-MS) the volatile compounds responsible for varietal aroma of nine clone candidates of Xinomavro. The research was conducted during two consecutive years (2017 and 2018). The vineyard was planted in 2011, with material selected according to the corresponding E.U. legislation for vine clone selection.

Results: We identified volatile compounds in both free-volatile and bound forms with glycosides. The second category is crucial for wine quality since it constitutes the pool for future wine aroma.

Keywords: Xinomavro, volatile compounds, varietal aroma, vine clone.

1. Introduction

