

DESIGN OF VINEYARD APPELLATION REFLECTING NATURAL TERROIR: A CASE STUDY OF MODRA, SLOVAKIA

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Design of vineyard appellation reflecting natural terroir: A case study of Modra, Slovakia

The current valid vineyard zoning in Slovakia and the other EU Member is not unified for all countries. One reason is that EU legislation relies on the Romanesque wine-labelling method based on the terroir conception which the region from where the grapes originate and in which they have been processed plays an important role. According to the Romanesque way, the borders of these regions should reflect the elements that make wines original and give them their typical character. However, the current division in Slovakia into wine-growing areas, municipalities and vineyards fields does not respect this condition. Our aim is to propose a new regionalization of vineyards in the municipality of Modra. It is based on field research of vineyards site conditions, analysis of LIDAR, meteorological and soil data in combination with geostatistical modelling at the local level. The wine-growing areas are categorised into seven homogeneous zones, which reflect the local terroir. The created zones should form the basis of an appellation to identify and protect wines produced in Modra. This paper provides a methodical procedure applicable in the regions where it is desired to form an appellation, which complies with the wine protection directives based on the geographical indication on the label.

Key words: appellation, terroir, vineyards, soil samples, digital terrain model, micro-climatic measurements, municipality of Modra, Slovakia

INTRODUCTION

From the beginning of winemaking, one has been asked the same questions: “Which wine is the best?”, “Where does this wine come from?”, “What does the region have that it produces such a unique wine?” These questions persist as long as drinking wine and they have a rising tendency. It has been concluded that the best wines are produced in France. The reason behind it (as every Frenchman says) is its unique terroir. The concept of terroir serves as great competitive advantage in many marketing strategies, as well as the promotion and presentation of individual regions, zones, and even specific areas of vineyards on the label. This system of protection, promotion and presentation was fully established, especially in France, Italy and Spain, but the so-called Romanesque wine classification system is based on the uniqueness of the regions where grapes ripen and process. However, the appellation system in Slovakia and the entire regionalization of vineyards do not currently correspond to this kind of protection and presentation. The concept origi-