

QUALITATIVE ANALYSIS OF NATURAL TERROIR UNITS. CASE STUDY: MODRA WINE RAYON (SLOVAKIA)

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Abstract. The importance of the terroir concept is rapidly increasing not only because consumer interest in the origin of the product, but also because of winemaker's interest in qualitatively high and unique wine production. The main aim of the article is to present a methodological framework of Natural terroir units (NTU's) for countries which still do not have applied French appellation system. The study depicts a logical framework consisting of natural terroir factors selection, followed by data reclassification, encoding and the final data composition and utilization. In this work, we identified and described 182 regional types in 362 NTU's in the Modra wine rayon. In the final stage were selected the most valuable vineyard sites for Green Veltliner using NTU coding system. The findings were subsequently compared to results which were obtained by decades lasting empirical observations in the study area conducted by enologist and winemakers. Most of the selected NTU's matched to empirical study results. Identification is proven in the GIS environment; this is considered the most useful instrument because of its ability to manipulate spatial data and perform spatial analysis.

Keywords: *coding system, empirical validation, vineyards, GIS, map composition*

Introduction

Wine character differs from continent to continent, country to country, region to region, even vineyard to vineyard, and of course from producer to producer. These differences are affected by countless variables inherited from natural conditions, processing techniques, cultivar selection, tradition and human factors which are difficult to define. The specific natural and human aspects form unique areas called terroir, and their possible combinations imprint persistent and invariable specificity on the product. Therefore, understanding terroir carries explicit regional recognition for every product, and generates not only opportunity, but more importantly, product demand and its propagation in the market place.

Terroir is the complex of geographical conditions which give wine its specific taste and distinguishes it from others. The term "terroir" is recognized and revered throughout the viticulture world because it embraces the influence of natural landscape properties; including geology, soil, topography and climate. It determines the most suitable wine variety for each particular site, and also the technical processes of wine makers; including the use of autochthonous microorganisms during fermentation (Van