

## **Geographical Information Systems for Vineyards Cadastral Inventarization**

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### **Abstract**

The present article has made an effort to answer two basic questions of the vineyard cadastral geographic information system (GIS) planning. The first is how to establish nearly similar vineyard cadastral regions for the survey. It was clear that the more we describe different parameters for the similar wine cadastral regions the more inhomogeneous and uneven geographical regions we get. These two different aims have no optimal solution and only the most widest usage, exploration and evaluation of the PARETO optimal points method can lead to acceptable alternatives.

The second part of the article is beyond the importance of vineyard intensity factor pointing to the necessity of the plot density factor. Our vine regions are fairly different from each other in plot density. Significant rearrangement can be experienced in positive and negative direction if we consider the plot density during the calculation of cadastral regions and at the determination of proper surveyors' number. The surveyors number will increase at those counties where average plot size is smaller than the national average.