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Spatial-temporal analysis of climate change and influence of Mediterranean Sea on a viticulture site Valencia D O

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The spatial-temporal variability of the climatic variables is critically observed on viticulture sites in the interest of quality of wine and climate change on local scale in the future. Various studies were elaborated regarding change of climatic variables on regional scales, although, there are just several researches made on local scale. The study is a part of doctoral project in the frame of LIFE-ADVICLIM, the international project of climate on worldwide climate change on viticulture sites. We conducted the research of last five decades on eight weather stations, located inside and in the surroundings of Valencia DO study site. In the analysis the following daily climate variables were used: mean, minimum and maximum daily temperature, daily precipitation and Winkler and Huglin bioclimatic indexes. By means of Spatial Analysis tools, we analyzed spatial variability, progress of climate change and the effect of the Mediterranean Sea on the research site. Observation on weather stations and analysis of derived data provided significant increase of the air temperature along with the bioclimatic indexes on all weather stations, particularly the stations in hinterland. Meanwhile the precipitation trend decreased, particularly in the winter season. The aim of this research is to combine spatial variability of climate change versus temporal variability of climate change. The progress of climate variables during the last five decades gave us the idea of the climate change and the influence of the Mediterranean Sea during the study period. The outcome of this research urges to adapt the vine according to climate change.

Biography

Igor Sirnik completed his university engineer degree studies at University of Ljubljana, Slovenia and his Master studies at the University of applied sciences, Karlsruhe in Germany. Afterwards he was working at the Ministry of Environment in Slovenia collaborating with the University of Ljubljana. He is a Doctoral student, pursuing a joint-degree PhD program at the Universidad Politécnica de Valencia, Spain and Université Rennes 2, France.

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