



Analysis of the spatial climate structure from a viticultural perspective. Application to determine viticulture suitability and zonification in Extremadura (Spain)

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The basis for assessing the suitability for viticulture in wine regions is an accurate depiction of the temperature spatial distribution. Thus, using data for a long time interval (1980-2011) and from 117 meteorological stations, four bioclimatic indices were calculated and their spatial distribution patterns were mapped using a multivariate method, the regression-kriging technique. It was obtained that the spatial variability of climate within Extremaduran natural regions (NRs) is significant. Although the warmer conditions predominate in Extremadura, some NRs have part of their territory by up to eight climate classes; this information enables a better understanding of the viticulture suitability within each NR and delineating homogeneous zones.

Finally, comparisons of Extremaduran NRs with others worldwide were conducted, which should be taken into account to select varieties and assess the possibilities of producing new wines.