

**Altitudinal variation in some ecophysiological parameters in leaves
of *Quercus ilex* in Sierra Nevada (Granada, Spain)**

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This work studies the influence of altitude on several characteristics of leaves of *Quercus ilex* in Sierra Nevada (Granada, Spain), where this specie shows the wider altitudinal range inside the Iberian Peninsula. Plant material was recollected at 300, 800, 1400 and 2000m above sea level during the middle of the four annual seasons. Mean leaf area and dry weight per leaf significantly diminished with altitude, but without statistical differences between 1400 and 2000m. Maximum values of Specific Leaf Area were obtained at 300 and 2000m, without significant differences between them. Chlorophyll content (measured with a SPAD portable meter) significantly varied between altitudes, but without statistical differences between 300 and 2000m. Leaf ash content increased with altitude. Significant differences were found in the content of total and reducing sugars between altitudes, but not between seasons. Relative Water Content significantly varied both between altitudes and seasons.