



## **Study of mineral content (Nutrients and Trace elements) in vine leaf and 4 weed species included in the vegetal cover in a Spanish vineyard.**

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The content of some mineral elements (Na, Ca, Mg, K, P, S, Fe, Mn, Si, Al, V, Cr, Cu, Rb, Sr, Ba, Zn, Pb, Ce, La and Nd) has been studied in vine leaf and four weed species (*Mentha sylvestris* L.; *Malva sylvestris* L., *Hordeum murinum* L. and *Scandix pecten-veneris* L.) included in the natural vegetal cover of a vineyard sited in Ciudad Real province (Central Spain). Samples were taken in May 2015, dried and milled in order to analyze them using the X Ray Fluorescence Technique. The results obtained have been compared with those measured in a vineyard located in a different site and with those suggested by the literature consulted for plants in general all around the world. The results indicate that some differences in mineral content among the weed species can be drafted. Great differences have been found in K, Si, Ca and Zn, although other elements, such as Mg, P, S, Ba and Nd, remained almost constant despite of the species. Moreover, the influence of the type of soil (different site) can give a different composition of the vine leaf in some elements. This last point is especially evident in the case of the Sr (more present in calcareous soils and leaves of plants grown on them, reaching 377 mg kg<sup>-1</sup> versus less than 86 mg kg<sup>-1</sup> in the non-calcareous studied soil).