

## **Effect of the Co-Milling Process on the Composition of Minor Compounds of the Virgin Olive Oils Obtained.**

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The general aim of this experimental work was to study the effect, if any, of the co-milling process of two different olive cultivars on the composition of minor compounds of the virgin olive oils obtained, as compared to their corresponding blends (“coupages”). In fact, several studies have point out the great importance on the composition and quality of virgin olive oil of the crushing and kneading operations in the oil processing technology. In particular, malaxation must be considered much more than just a simple physical separation, since a complex bioprocess takes place which is very relevant to the final product composition and quality.

In this study, two different Spanish varieties, Arbequina and Cornicabra, were co-processed using different proportions (0-100, 25-75, 50-50, 75-25 and 100-0% respectively) in the Abencor system in order to obtain the corresponding virgin olive oil samples. Moreover, the two pure monovarietal virgin olive oils were blended using the same proportions to compare the composition in minor components of the “coupages” with respect to that obtained by means of the co-milling process. The profiles of volatile and individual phenolic compounds as well as the contents of other relevant minor compounds were determined and studied, and the experimental results observed are reported and discussed in this poster.