

Supplement materials

Different olive oil extraction systems

Discontinuous and continuous extraction processes can be used to obtain olive oil. The discontinuous process is known as the press method and the continuous process is realized through centrifugation. In the last one, it is possible to distinguish between two processes that differ in the number of exits that the decanter (horizontal centrifuge) has. In the case of having three exits for olive oil, pomace and vegetation water, the process is called three-phases process. In case of using a two-exits decanter, one for olive oil and another one for pomace, the process is called two-phases process. The continuous extraction process using a two-exits decanter is the most widely used. Currently, more than 90% of Spanish olive oil industries have implemented the more sustainable two-phase system.

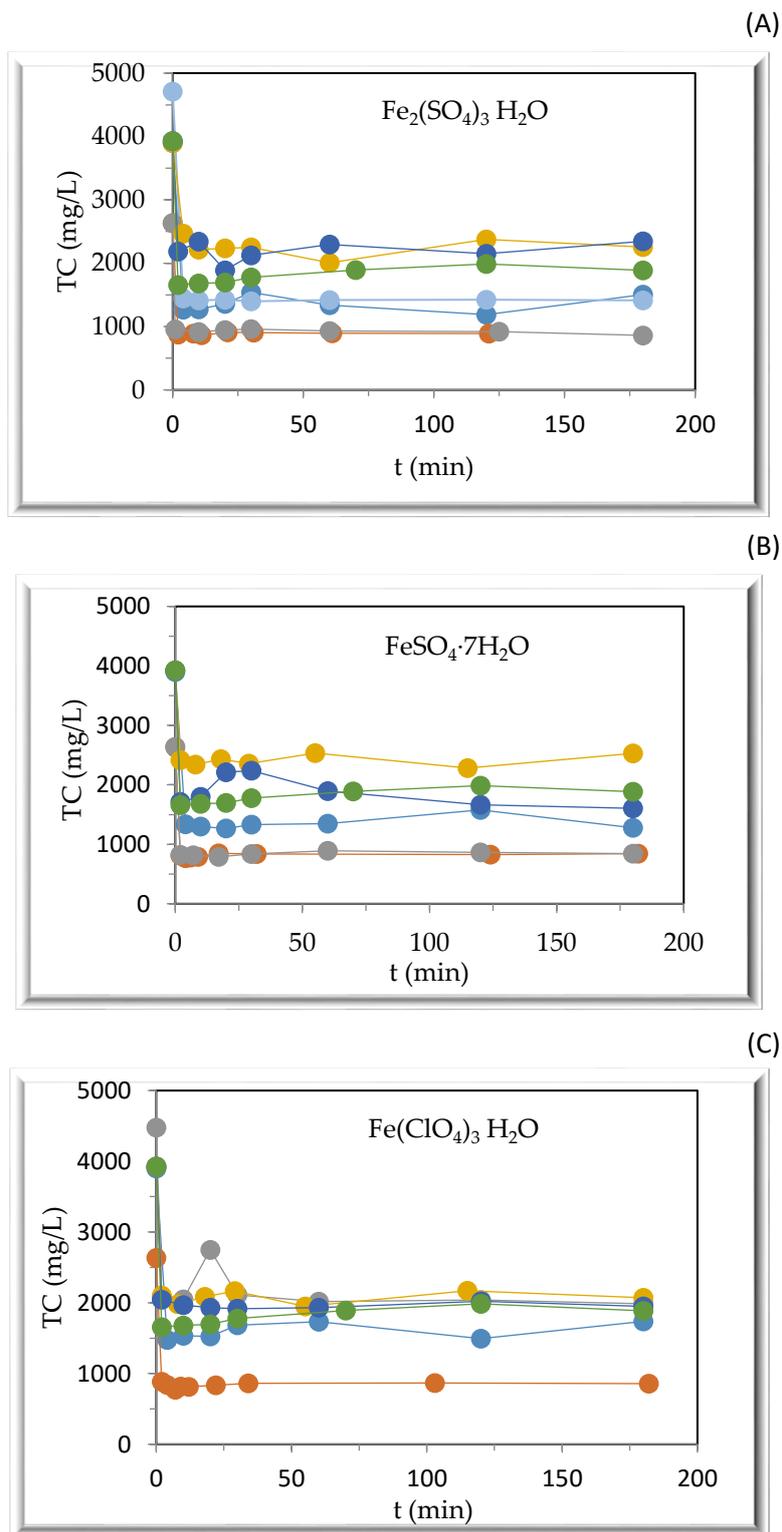


Figure 1S. Variation of the TC content of OMW with respect to operating time for different concentrations of H_2O_2 (● 2.5%, ● 5%, ● 10%, ● 15%, ● 20% and ● 30%) in the system (Catalyst/UV/ H_2O_2). Common operating conditions: pH = 3, T = 20 °C, stirring speed = 150 rpm and the ratio $[\text{FeCl}_3]/[\text{H}_2\text{O}_2] = 0.03$.