

A Simple Method for the Determination of Total *o*-diphenols in Virgin Olive Oils

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A simple method for the analysis of VOO ortho-diphenols by visivel spectrometry has been proposed and compared with the traditional SPE technique followed by the colorimetric determination method using sodium molybdate or by HPLC analysis using a UV detector. Our approach to determining the total *o*-diphenolic compounds exploits the reaction of oxidation of *o*-diphenols to quinones in a basic medium.

Results showed a better correlation between the total *o*-diphenols determination by the HPLC and the total *o*-diphenols determination by the proposed method than between the total *o*-diphenols determination by the HPLC and the total *o*-diphenols determination by the molibdate colorimetric method.

The proposed method involves a very low sample manipulation, uses cheap reagents and can be performed in less than 40 minutes, using a small olive oil sample of 2 g.