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IN-PIPETTE SOLID-PHASE EXTRACTION
PRIOR TO FLOW-MODULATION
COMPREHENSIVE TWO-DIMENSIONAL GAS
CHROMATOGRAPHY WITH DUAL
DETECTION FOR THE DETERMINATION OF
MINOR COMPONENTS IN VEGETABLE OILS

Laura Barp, Flavio A. Franchina, Giorgia Purcaro,
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COMPREHENSIVE TWO-DIMENSIONAL GAS CHROMATOGRAPHY WITH DUAL
DETECTION FOR THE DETERMINATION OF MINOR COMPONENTS IN
VEGETABLE OILS**

Laura Barp^{a,1}, Flavio A. Franchina^{b,1}, Giorgia Purcaro^{b*}, Peter Q. Tranchida^a, Luigi Mondello^{a,b}

^a“Dipartimento di Scienze Chimiche, Biologiche, Farmaceutiche ed Ambientali”, University of Messina, - Polo Annunziata - viale Annunziata, 98168 – Messina, Italy

^bChromaleont s.r.l., c/o University of Messina, - Polo Annunziata - viale Annunziata, 98168 – Messina, Italy

giorgia.purcaro@chromaleont.it

giopurcaro@gmail.com

*Corresponding author: Tel.: +39-090-3503348; fax +39-090-358220.

Abstract

The present research is based on the development of an effective, environmentally-friendly and low-cost method for investigation of minor components in vegetable oils, exploiting the advantages of a miniaturized solid-phase extraction (SPE) and the potential of flow modulation (FM) comprehensive two-dimensional gas chromatography (GC×GC), coupled to a mass spectrometer (MS) and a flame ionization detector (FID).

The initial sample preparation step was carried out using a miniaturized approach characterized by a SPE process in a Pasteur pipette. Then, the isolated fraction was injected into an FM GC×GC

¹ These authors contributed equally to this work

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