HELLENIC REPUBLIC
National and Kapodistrian University of Athens
FACULTY OF PHARMACY
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PharmaGnose

CERTIFICATE OF OLIVE OIL POLYPHENOLS ANALYSIS

Description	Olive oil sample
Producer / Distributor	SPILIAKOPOULOU MARIA & CO
Origin	OLYMPIA
Type of Cultivation	CONVENTIONAL
Date of reception	13/02/2018
Date of analysis	22/02/2018
Packaging	GLASS BOTTLE
ANALYSIS*	**1.** Extraction/Sample preparation
	2. Quantitative determination of Hydroxytyrosol (**HT**) and Tyrosol (**T**) using the HPLC-DAD technique, according to the IOC method with some modifications (http://www.internationaloliveoil.org/documents/viewfile/4141-met29eng).
	3. Semi-quantitative determination of Oleacein (**OLEA**) and Oleocanthal (**OLEO**) using the HPLC-DAD technique.
	4. Determination of **HT, T** and their derivatives /Kg Olive oil, after acidic hydrolysis of the biophenols from olive oil extract using the analytical technique of HPLC-DAD[1].

**Experimental details: available upon request. [1]* Mastralexi et al., 2014. Addressing analytical requirements to support health claims on "olive oil polyphenols" (EC Regulation 432/2012), *J Agric Food Chem*, 26;62(12):2459-61.

RESULTS

QUANTITIVE AND SEMI-QUANTITIVE DETERMINATION OF PHENOLS (HPLC-DAD)					
mg /Kg Olive oil				ACIDIC HYDROLYSIS	
HT	T	OLEA	OLEO	Total mg HT & T /Kg Olive oil	Total mg HT, T and their derivatives /Kg Olive oil [1]
5,45	7,19	103	183	382	888

HT: Hydroxytyrosol, **T**: Tyrosol, **OLEA**: Oleacein, **OLEO**: Oleocanthal

Comments

Based on the results of olive oil analysis, the specific olive oil sample analyzed on the above-mentioned date, was found to contain **888 mg HT, T and their derivatives /Kg olive oil**. Thus, it can be concluded that the analyzed olive oil sample meets the specifications of the **EU regulation 432/2012** concerning the health claim on olive oil polyphenols (http://www.efsa.europa.eu/sites/default/files/scientific_output/files/main_documents/2033.pdf).

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