



**National and Kapodistrian  
University of Athens**

Faculty of Pharmacy  
Department of Pharmacognosy  
& Natural Products Chemistry  
Panepistimiopolis Zografou  
15 771 Athens  
Tel:+30 210 72 74052  
magiatis@pharm.uoa.gr



Athens, 25/11/2016  
N°: 354/2016

**CERTIFICATE OF ANALYSIS**

**Owner:** Julio Gallego - ECOLIBOR

**Harvest season:** November 2016

**Geographic origin:** Spain

**Physical properties:**

Taste: strong pungent and bitter character

**Chemical analysis**

Oleocanthal: 604 mg/Kg

Oleacein: 230 mg/Kg

Oleuropein aglycon (monoaldehyde form): 167 mg/Kg

Oleuropein aglycon (dialdehyde forms)\*: 180 mg/Kg

Ligstroside aglycon (monoaldehyde form): 145 mg/Kg

Ligstroside aglycon (dialdehyde forms)\*\*: 751 mg/Kg

Total hydroxytyrosol derivatives: 578 mg/Kg

Total derivatives of tyrosol: 1500 mg/Kg

Oleocanthal+Oleacein (Index D1): 834 mg/Kg

**Total of analyzed compounds (index D3): 2077 mg/Kg**

**Comments**

The levels of oleocanthal and oleacein are higher than the average values (135 και 105 mg/Kg respectively) of the samples included in the international study performed at the University of California, Davis.


**The daily consumption of 20 g of the analyzed olive oil sample provides 41.5 mg of hydroxytyrosol, tyrosol or their derivatives (>>5 mg) and consequently the oil belongs to the category of oils that protect the blood lipids from oxidative stress according to the Regulation 432/2012 of the European Union.**

It should be noted that oleocanthal and oleacein present important biological activity and they have been related with anti-inflammatory, antioxidant, cardioprotective and neuroprotective activity.

The chemical analysis was performed according to the method published in J. Agric. Food Chem., 2012, 60 (47), pp 11696–11703, J. Agric. Food Chem., 2014, 62 (3), 600–607 and OLIVAE, 2015, 122, 22-33.

\*Oleomissional+Oleuropeindial \*\*Ligstrodiol+Oleokoronal

Prokopios Magiatis

  
**PROKOPIOS MAGIATIS**  
ASSOCIATE PROFESSOR  
UNIVERSITY OF ATHENS  
FACULTY OF PHARMACY  
DEPARTMENT OF PHARMACOGNOSY  
AND NATURAL PRODUCTS CHEMISTRY