



**National and Kapodistrian
University of Athens**

Faculty of Pharmacy
Department of Pharmacognosy & Natural Products Chemistry
Panepistimiopolis Zografou
15771, Athens
Tel: +30 210 72 74052
magiatis@pharm.uoa.gr



Athens, 16/02/2018
Cert.Num: 1718-C00586

CERTIFICATE OF ANALYSIS

Brand Name: MONOVARIETAL BIO
Owner: PAMAKO
Variety: TSOUNATI
Origin: AGRILES CANEA GREECE

Analysis Date: 14/02/2018

Chemical Analysis

Oleocanthal	214 mg/Kg
Oleacein	187 mg/Kg
Oleocanthal + Oleacein (index D1)	401 mg/Kg
Ligstroside aglycon (monoaldehyde form)	144 mg/Kg
Oleuropein aglycon (monoaldehyde form)	224 mg/Kg
Ligstroside aglycon (dialdehyde form)	400 mg/Kg
Oleuropein aglycon (dialdehyde form)	248 mg/Kg
Total tyrosol derivatives	758 mg/Kg
Total hydroxytyrosol derivatives	659 mg/Kg
Total phenols analyzed	1.417 mg/Kg

Comments :

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

The daily consumption of 20 g of the analyzed olive oil provides 28.3 mg of hydroxytyrosol, tyrosol or their derivatives. Olive oils that contain >5 mg per 20 gr belong 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 **Ligstrodial+Oleokoronal

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