

## National and Kapodistrian University of Athens Faculty of Pharmacy

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02/11/2020

Cert.Num: 2021-C00216

Athens,

**CERTIFICATE OF ANALYSIS** 

		Analysis Date: 02/11/2020	
Owner:	thallon		
Variety:	CHALKIDIKIS		
Origin:	ORMULIA CHALKIDIKI GREECE		
Harvest Period:	October 2020	Production Date: 24/10/2020	
<u>Chemical Analysis</u>			
Oleocanthal		372 ma/Ka	

Oleocanthal	372	malka
		mg/Kg
Oleacein	180	mg/Kg
Oleocanthal + Oleacein (index D1)	552	mg/Kg
Ligstroside aglycon (monoaldehyde form)	58	mg/Kg
Oleuropein aglycon (monoaldehyde form)	70	mg/Kg
Ligstroside aglycon (dialdehyde form)	232	mg/Kg
Oleuropein aglycon (dialdehyde form)	78	mg/Kg
Total tyrosol derivatives	663	mg/Kg
Total hydroxytyrosol derivatives	328	mg/Kg
Total polyphenols analyzed	991	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 19.8 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 ASSOCI PROFESSOR ASSENT OF AT HEN S FACULA PHARMACY DEPARTMENT OF PHARMACOGNOSY OFATHENS AND NATURA **TS CHEMISTRY**