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**CERTIFICATE OF ANALYSIS**

**Analysis Date:** 11/11/2020

**Owner:** VLACHOS NIKOLAOS  
**Variety:** MEGARITIKI  
**Origin:** KASTANOCHORI NIGRITA SERRES GREECE

**Chemical Analysis**

Acidity: 0,26 (<0,8)	
Peroxides: 9 meqO <sub>2</sub> /Kg (<20)	
K232: 2,024 (<2,5), K270: 0,129 (<0,22), ΔK: -0,0040	
Oleocanthal	381 mg/Kg
Oleacein	137 mg/Kg
Oleocanthal + Oleacein (index D1)	518 mg/Kg
Ligstroside aglycon (monoaldehyde form)	58 mg/Kg
Oleuropein aglycon (monoaldehyde form)	34 mg/Kg
Ligstroside aglycon (dialdehyde form)	53 mg/Kg
Oleuropein aglycon (dialdehyde form)	22 mg/Kg
Total tyrosol derivatives	492 mg/Kg
Total hydroxytyrosol derivatives	193 mg/Kg
Total polyphenols analyzed	684 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 13.7 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

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