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Nº: 512/2016

CERTIFICATE OF ANALYSIS

Owner: Dimitriadi Chloe "BIOLEA"
Harvest: 2016
Origin: Crete, Greece
Physical properties: significant pungent and bitter character
Chemical analysis

Oleocanthal: 164 mg/Kg
Oleacein: 172 mg/Kg
Oleuropein aglycon (monoaldehyde form): 161 mg/Kg
Oleuropein aglycon (dialdehyde forms)*: 395 mg/Kg
Ligstroside aglycon (monoaldehyde form): 83 mg/Kg
Ligstroside aglycon (dialdehyde forms)**: 485 mg/Kg
Total hydroxytyrosol derivatives: 727 mg/Kg
Total derivatives of tyrosol: 732 mg/Kg
Oleocanthal+Oleacein (Index D1): 335 mg/Kg
Total of analyzed compounds (index D3): 1460 mg/Kg

Comments

The levels of oleocanthal and oleacein are higher than the average values (135 and 105 mg/Kg) 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 29.2 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**Ligstrodial+Oleokoronal

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