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**Athens:** **24/10/2022**

**Cert. Num:** **C2223-00160**

# CERTIFICATE OF ANALYSIS

**Brand Name:** ANTONOLIVA COLD PRESS EARLY HARVEST
**Analysis Date:** 20/10/2022
**Owner:** ANTONOPOULOS DIMITRIOS
**Variety:** KALAMON-KORONEIKI-KOUTSOURELIA
**Origin:** AGIOS GEORGIOS MESSOLOGGI AETOLIA AND ACARNANIA
**Harvesting Period:** September 2022 - October 2022
**Production Date:**
**Oil Mill:** ANTONOPOULOS DIMITRIOS

## Chemical Analysis

Acidity: 0,20(<0,8)

Peroxides: 4,80 meqO2/Kg (<20)

K232: 1,915 (<2,5), K270: 0,155 (<0,22), ΔK: -0,0050

| | | |
|---|---|---|
| Oleocanthal | 503 | mg/Kg |
| Oleacein | 144 | mg/Kg |
| Oleocanthal+Oleacein (index D1) | 647 | mg/Kg |
| Ligstroside aglycon (monoaldehyde form) | 49 | mg/Kg |
| Oleuropein aglycon (monoaldehyde form) | 31 | mg/Kg |
| Ligstroside aglycon (dialdehyde form)* | 23 | mg/Kg |
| Oleuropein aglycon (dialdehyde form)** | <5 | mg/Kg |
| Free Tyrosol | <5 | mg/Kg |
| Total tyrosol derivatives | 574 | mg/Kg |
| Total hydroxytyrosol derivatives | 176 | mg/Kg |
| Total polyphenols analyzed | 749 | mg/Kg |

**Comments:**

The levels of oleocanthal and oleacein are higher than the average values (135 and 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 provides 14,99mg 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 at the National and Kapodistrian University of Athens according to the method that has been submitted to EFET and published in J. Agric. Food Chem. 2012, 60, 11696, J. Agric. Food Chem. 2014, 62, 600 & Molecules 2020, 25, 2449.
The results relate to the analyzed sample.
*Oleomissional+Oleuropeindial **Ligstrodial+Oleokoronal

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