UNIVERSITY OF ATHENS
DEPARTMENT OF CHEMISTRY
ANALYTICAL CHEMISTRY LABORATORY
CHEMICAL ANALYSIS-QUALITY CONTROL LABORATORY

✉ Panepistimiopolis Zografou, 157 71 Athens
☎ ++30210 7274430 - 7274317
Fax: ++30210 7274750

Date: 21/12/2022
Report of Analysis code: IOAN221221

TO: GEORGIO IOANNOU

REPORT OF ANALYSIS

A. Method

Determination of the **bioactive content** for one (1) olive oil sample of **organic** cultivation, from Pelei Argolidas region, with coding "**IOAN.22**".

*Sampling***:** The sampling was performed by the client and the sample was received by the laboratory on 07-12-2022.

Method: Liquid chromatography coupled with high resolution mass spectrometry (LC-QTOF/MS)

Date of Analysis: From 14-12-2022 to 16-12-2022.

B. Results

Analyte	**IOAN.22 (mg/kg)**
10-Hydroxy decarboxymethyl oleuropein aglycone*	0.05
10-Hydroxy-10-Methyl oleuropein aglycone*	0.06
10-Hydroxyoleuropein aglycone*	0.06
1-Acetoxypinoresinol	0.54
Apigenin	5.06
Elenolic acid	0.61
Eriodictyol	0.10
Hydroxylated form of elenolic acid	0.44
Hydroxytyrosol*	1.84
Hydroxytyrosol acetate*	0.54
Ligstroside aglycone*	41.5
Luteolin	0.94
Methyl oleuropein aglycone*	0.07
Naringenin	0.11
Oleacein*	31.6
Oleocanthal*	30.8
Oleocanthalic acid*	0.42
Oleokoronal*	97.2
Oleomissional*	42.2
Oleuropein aglycone*	45.1

p-coumaric acid	0.07
Pinoresinol	1.29
Syringaresinol	0.58
Tyrosol*	1.08
Vanillin	0.08
Total of Hydroxytyrosol, Tyrosol and Oleuropein derivatives*	**292**
Total phenolic content	**302**

C. Comments on results

The total content of hydroxytyrosol, tyrosol and oleuropein derivatives of the olive oil with coding "**IOAN.22**", is above 250 mg/kg (**292 mg/kg**) and therefore belongs to the class of oils that protect LDL cholesterol from oxidation as it is described by the EU 432/2012 legislation, maintaining high HDL levels and protecting from cardiovascular diseases (EFSA 2012).

The Analyst **The Scientific Coordinator**

I. Tzavellas **N. Thomaidis**