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2 OLEOCANTHALIC ACID, A CHEMICAL  
3 MARKER OF OLIVE OIL AGING AND EXPOSURE  
4 TO HIGH STORAGE TEMPERATURE WITH  
5 POTENTIAL NEUROPROTECTIVE ACTIVITY

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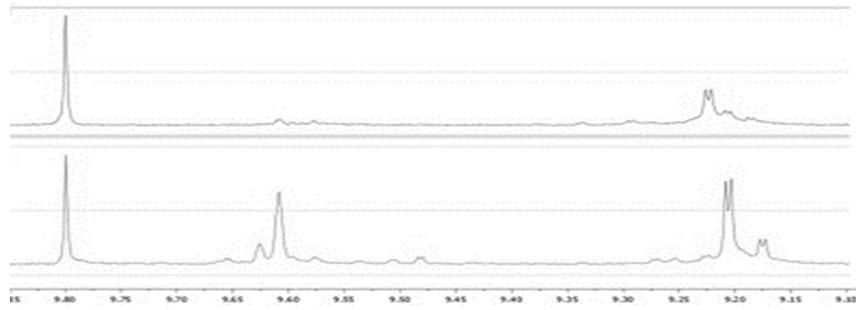
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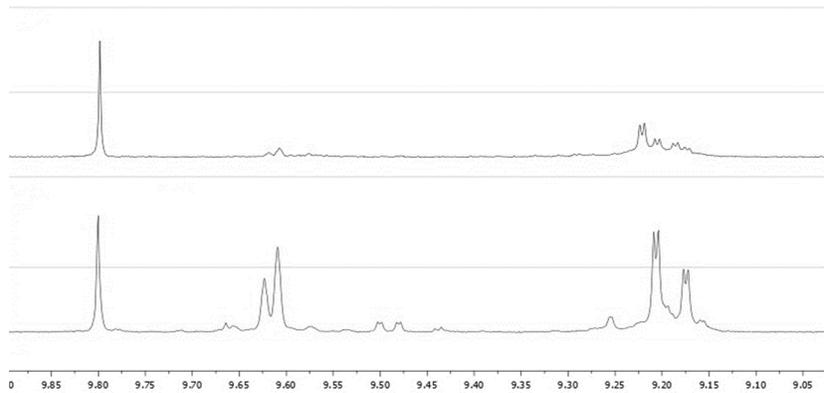
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24 Fig. 1 Evolution of sample No 1 from the beginning of the research (bottom)  
25 to the end after 24 months (up)

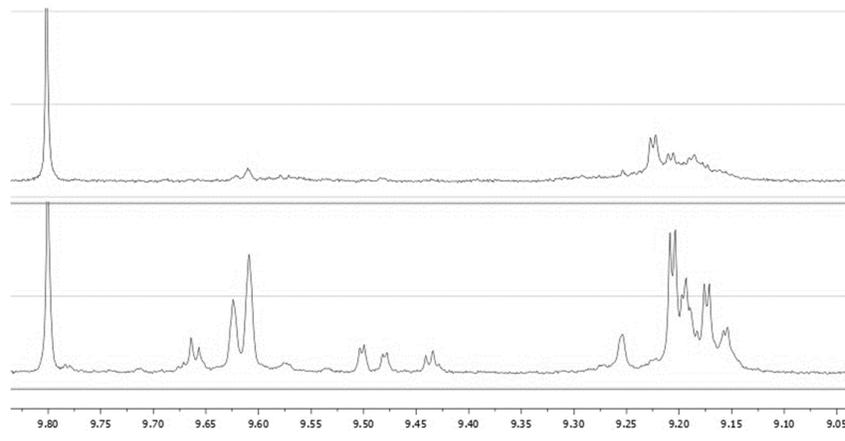
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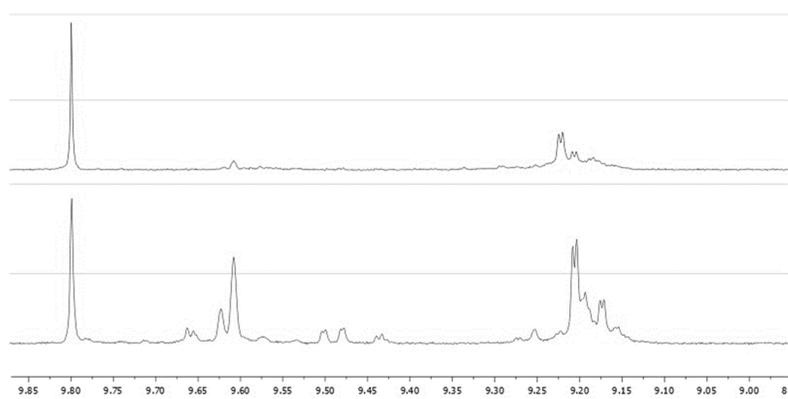
28 Fig. 2 Evolution of sample No 2 from the beginning of the research (bottom)  
29 to the end (up)

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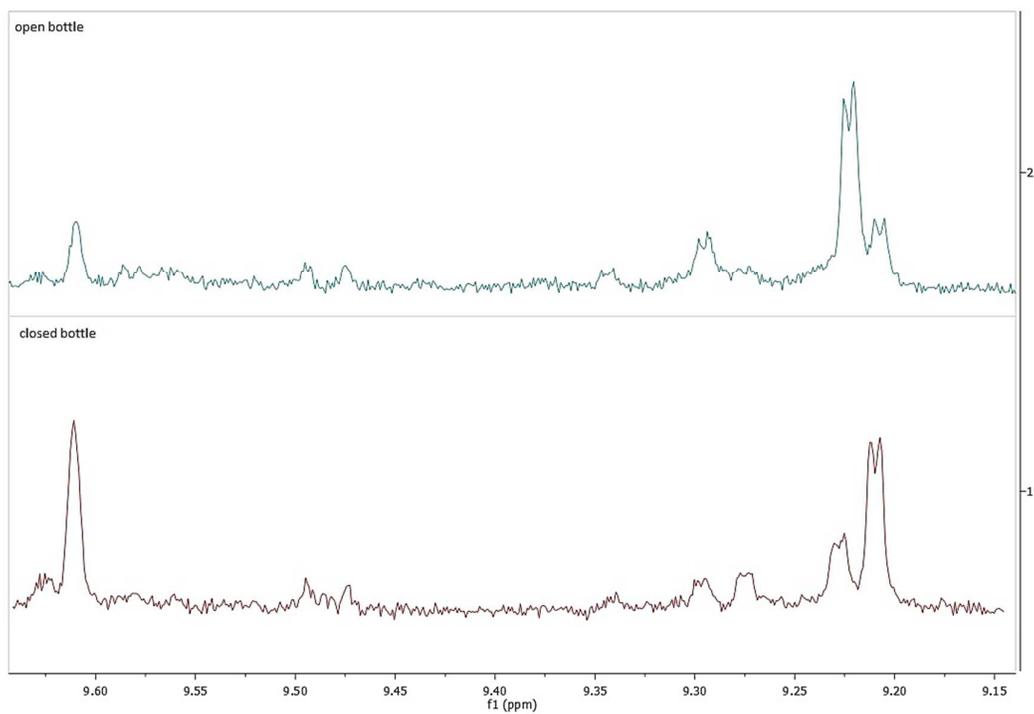
Fig. 3 Evolution of sample No 3 from the beginning of the research (bottom)  
to the end (up)



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Fig. 4 Evolution of sample No 4 from the beginning of the research (bottom)  
to the end (up)

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46 Fig 5. Changes in oleocanthal to oleocanthalic acid ratio, in the same sample with  
47 PV=8, heated in open vial (up) and closed vial without headspace (bottom) for 20  
48 days.

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## Supplementary Table 1

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<b>SAMPLE</b>	<b>ORIGIN</b>	<b>VARIETY</b>
<i>ANTN 1</i>	Pelion mountain, Greece	Wild olive ( <i>Olea sylvestris</i> )
<i>ANTN 2</i>	Corfu, Greece	Local, "Lianolia"
<i>ANTN 3</i>	Corfu, Greece	Local, "Lianolia"
<i>ANTN 4</i>	Corfu, Greece	Local, "Lianolia"
<i>ANTN 5</i>	Corfu, Greece	Local, "Lianolia"
<i>ANTN 6</i>	Corfu, Greece	Local, "Lianolia"
<i>ANTN 7</i>	Corfu, Greece	Local, "Lianolia"
<i>ANTN 8</i>	Gerakini area, Chalkidiki, Greece	Halkidiki
<i>ANTN 9</i>	Chalkidiki, Greece	Halkidiki
<i>ANTN 10</i>	Corfu, Greece	Local, "Lianolia"
<i>ANTN 11</i>	Corfu, Greece	Local, "Lianolia"
<i>ANTN 12</i>	Kozani, Greece	Megaritiki
<i>ANTN 13</i>	Koroni, Greece	Koroneiki
<i>ANTN 14</i>	Chalkidiki, Greece	Halkidiki
<i>ANTN 15</i>	Lakonia region, Greece	Koroneiki
<i>ANTN 16</i>	Corfu, Greece	Local, "Lianolia"
<i>ANTN 17</i>	Corfu, Greece	Local, "Lianolia"
<i>ANTN 18</i>	Lakonia region, Greece	Koroneiki
<i>ANTN 20</i>	Kalamata, Greece	Koroneiki
<i>ANTN 21</i>	Attica region, Greece	Megaritiki
<i>ANTN 22</i>	Corfu, Greece	Local, "Lianolia"
<i>ANTN 23</i>	Zakynthos, Greece	Local
<i>ANTN 24</i>	Zakynthos, Greece	Local
<i>ANTN 25</i>	California, USA	Arbequina
<i>ANTN 26</i>	Zakynthos, Greece	Local
<i>ANTN 27</i>	Lakonia region, Greece	Athinolia
<i>ANTN 28</i>	California, USA	Arbequina
<i>ANTN 29</i>	California, USA	Arbequina

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## Supplementary Table 2

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SAMPLE	Oleocanthal mg/Kg TIME = 0	Oleocanthal mg/Kg 6 months	Oleocanthal mg/Kg 12 months	Oleocanthal mg/Kg 18 months	Oleocanthal mg/Kg 24 months
ANTN1	307	255	236	158	n.t.
ANTN2	374	369	272	191	115
ANTN3	258	64	42	15	n.t.
ANTN4	137	118	93	64	n.t.
ANTN5	469	401	285	266	n.t.
ANTN6	401	374	347	204	n.t.
ANTN7	444	393	366	234	134
ANTN8	174	169	155	139	n.t.
ANTN9	318	263	184	128	n.t.
ANTN10	218	193	169	131	n.t.
ANTN11	353	263	224	199	120
ANTN12	155	123	99	83	n.t.
ANTN13	85	85	83	72	n.t.
ANTN14	58	50	50	37	n.t.
ANTN15	126	118	101	85	n.t.
ANTN16	353	288	247	245	n.t.
ANTN17	336	288	218	172	110
ANTN18	204	177	123	72	n.t.
ANTN20	188	166	139	115	n.t.
ANTN21	85	85	77	56	42
ANTN22	382	339	291	177	n.t.
ANTN23	53	50	42	31	n.t.
ANTN24	45	37	37	26	n.t.
ANTN25	80	66	57	47	n.t.
ANTN26	142	143	142	137	n.t.
ANTN27	204	174	166	120	n.t.
ANTN28	80	64	64	47	n.t.
ANTN29	155	115	116	96	n.t.

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63 n.t.: not tested