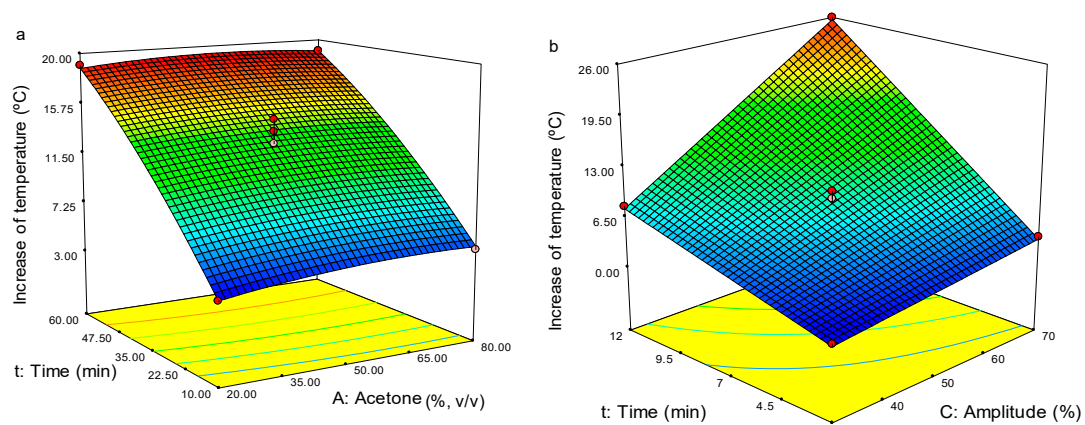


**Table S1.** Final temperature reached in the experimental assays of the Box-Benhken design and factorial design for the bath- and probe-type ultrasound-assisted extraction (UAE), respectively.

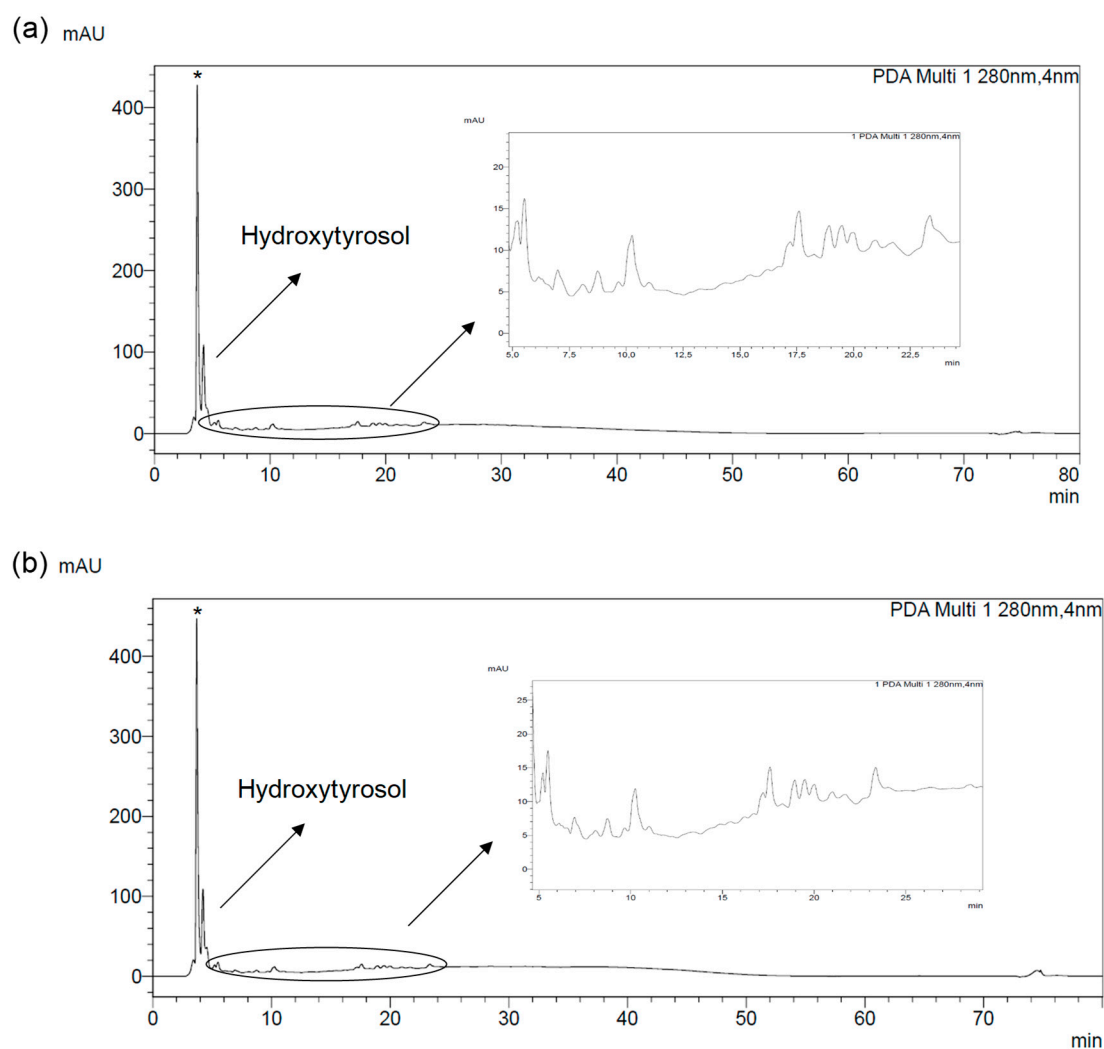
RUN	Increment of Temperature (°C)	RUN	Increment of Temperature (°C)
Box-Benhken design		14	14
1	11	15	19
2	19	16	15
3	12	17	19
4	4	Factorial design	
5	5	1	8
6	12	2	10
7	13	3	26
8	4	4	4
9	5	5	10
10	11	6	9
11	13	7	1
12	11	8	9
13	18	9	8

**Table S2.** F-ratios and p-values obtained for the operational parameters when the increment of temperature was evaluated as response variable in the Box-Behnken design (BBD) and in the factorial design (FD) for the bath- and probe-type ultrasound-assisted extraction, respectively.

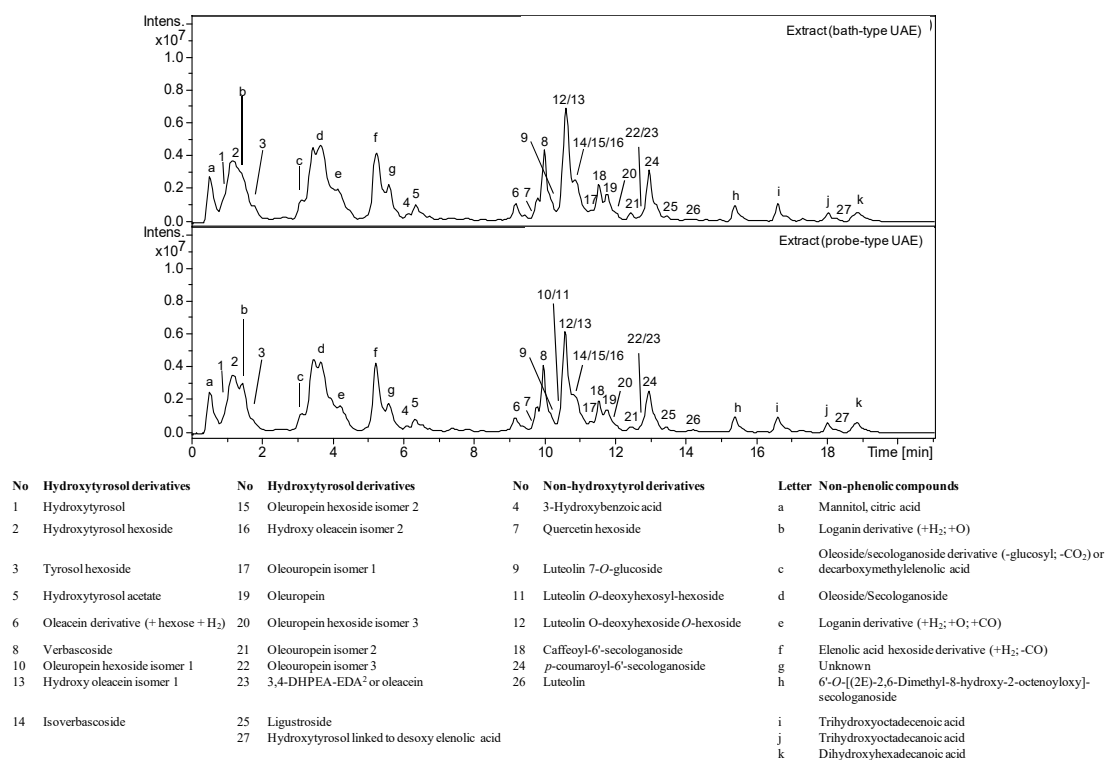
Increment of Temperature (°C) (BBD)		
Source	F-Ratio	P-Value
A:Acetone	1.04	0.3411
t:Time	376.54	<0.0001
B:Solids	0.46	0.5178
AA	0.88	0.3792
At	0.23	0.6449
AB	0.93	0.3677
tt	3.71	0.0954
tB	0	1
BB	2.05	0.1951
Increment of temperature (°C) (FD)		
Source	F-Ratio	P-Value
C:Amplitude	158.76	<0.0001
t:time	302.76	<0.0001
Ct	81	0.0003



**Figure S1.** Response surface plot for the increment of temperature as function a) of the time and acetone in the Box-Behnken design and b) of time and amplitude in the factorial design.



**Figure S2.** HPLC chromatogram at 280 nm of the exhaustive olive pomace extract obtained with water-acetone at optimal conditions by: (a) bath- and (b) probe-type ultrasound-assisted extraction. \* Acetone signal.



**Figure S3.** Base peak chromatogram of the exhaustive olive pomace extract obtained with water-acetone at optimal conditions by: (a) bath- and (b) probe-type ultrasound-assisted extraction. The characterized compounds are also shown.