



**Figure S1.** Representative chromatograms obtained for: juglone standard (green colour) and methanolic extracts obtained in the Soxhlet apparatus before concentration (blue colour), after concentration (red colour) and after concentration with the addition of juglone (pink colour),  $\lambda=420$  nm.

**Table S1.** Equations of Trolox calibration curves in the concentration range of 2.5-25  $\mu\text{g/mL}$  obtained using various methods for assessing antioxidant and solvents.

| Methods           | Solvent       | Calibration curve equation                |
|-------------------|---------------|---|
| ABTS              | MeOH          | $y = 0.0059x + 0.0059 \quad R^2 = 0.9957$ |
|                   | Ethyl acetate | $y = 0.0059x + 0.0076 \quad R^2 = 0.9948$ |
|                   | Chloroform    | $y = 0.0052x + 0.0068 \quad R^2 = 0.9950$ |
|                   | Acetone       | $y = 0.0070x + 0.0092 \quad R^2 = 0.9950$ |
| DPPH              | MeOH          | $y = 0.0043x + 0.0001 \quad R^2 = 0.9984$ |
|                   | Ethyl acetate | $y = 0.0038x - 0.0068 \quad R^2 = 0.9985$ |
|                   | Chloroform    | $y = 0.0037x + 0.0049 \quad R^2 = 0.9985$ |
|                   | Acetone       | $y = 0.0038x + 0.0100 \quad R^2 = 0.9975$ |
| $\beta$ -carotene | MeOH          | $y = 3.7470x + 2.2395 \quad R^2 = 0.9951$ |
|                   | Ethyl acetate | $y = 3.5772x + 2.3449 \quad R^2 = 0.9952$ |
|                   | Chloroform    | $y = 3.9507x + 2.5050 \quad R^2 = 0.9960$ |
|                   | Acetone       | $y = 3.5227x + 1.5163 \quad R^2 = 0.9984$ |
| FRAP              | MeOH          | $y = 0.0061x - 0.0036 \quad R^2 = 0.9960$ |
|                   | Ethyl acetate | $y = 0.0044x - 0.0032 \quad R^2 = 0.9948$ |
|                   | Chloroform    | $y = 0.0060x - 0.0046 \quad R^2 = 0.9955$ |
|                   | Acetone       | $y = 0.0043x - 0.0019 \quad R^2 = 0.9951$ |
| CUPRAC            | MeOH          | $y = 0.0064x - 0.0034 \quad R^2 = 0.9952$ |
|                   | Ethyl acetate | $y = 0.0073x - 0.0053 \quad R^2 = 0.9951$ |
|                   | Chloroform    | $y = 0.0017x - 0.0007 \quad R^2 = 0.9960$ |
|                   | Acetone       | $y = 0.0074x - 0.0030 \quad R^2 = 0.9981$ |

**Table S2.** Equations of gallic acid calibration curves in the concentration range of 2.5-500 µg/mL obtained using various solvents.

| Methods          | Solvent       | Calibration curve equation |                |
|------------------|---------------|----------------------------|----------------|
| Folin-Ciocalteou | MeOH          | $y = 0.0074x + 0.0113$     | $R^2 = 0.9991$ |
|                  | Ethyl acetate | $y = 0.0074x + 0.0145$     | $R^2 = 0.9982$ |
|                  | Chloroform    | $y = 0.0065x + 0.0131$     | $R^2 = 0.9984$ |
|                  | Acetone       | $y = 0.0099x + 0.0175$     | $R^2 = 0.9983$ |

**Table S3.** F values and *p* values obtained during variance analysis for the data concerning total phenolics amount, expressed in [ $\mu\text{g/g}$ ], in extracts obtained by extraction in the Soxhlet apparatus, maceration and PLE using different extractants (chloroform, acetone, ethyl acetate and methanol). Data from Table 2  
Bold values indicate systems where the results are statistically insignificant ( $F < F_{\text{tab}}$ ,  $P > 0.05$ ;  $F_{\text{tab}} = 7.71$ ).

|                              | Macerat-chloroform                              | PLE-chloroform                                  | Soxhlet-acetone                                 | Macerat-acetone                                 | PLE-acetone                                     | Soxhlet-ethyl acetate                           | Macerat-ethyl acetate                           | PLE-ethyl acetate                               | Soxhlet-methanol                                | Macerat-methanol                                | PLE-methanol                                    |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|
| <b>Soxhlet-chloroform</b>    | F = 71.85<br><i>P</i> = 0.001                   | <b>F = 1.46 (a)</b><br><b><i>P</i> = 0.29</b>   | F = 1607.32<br><i>P</i> = 2.31•10 <sup>-6</sup> | F = 1000.52<br><i>P</i> = 5.95•10 <sup>-6</sup> | F = 2295.11<br><i>P</i> = 1.14•10 <sup>-6</sup> | F = 701.66<br><i>P</i> = 1.21•10 <sup>-5</sup>  | F = 610.09<br><i>P</i> = 1.59•10 <sup>-5</sup>  | F = 765.08<br><i>P</i> = 1.02•10 <sup>-5</sup>  | F = 2569.39<br><i>P</i> = 9.06•10 <sup>-7</sup> | F = 2530.22<br><i>P</i> = 9.35•10 <sup>-7</sup> | F = 2859.14<br><i>P</i> = 7.32•10 <sup>-7</sup> |
| <b>Macerat-chloroform</b>    | -   | F = 87.11<br><i>P</i> = 0.001                   | F = 1864.78<br><i>P</i> = 1.72•10 <sup>-6</sup> | F = 1295.51<br><i>P</i> = 3.56•10 <sup>-6</sup> | F = 2471.46<br><i>P</i> = 9.80•10 <sup>-7</sup> | F = 996.82<br><i>P</i> = 6.00•10 <sup>-6</sup>  | F = 901.50<br><i>P</i> = 7.33•10 <sup>-6</sup>  | F = 1061.63<br><i>P</i> = 5.29•10 <sup>-6</sup> | F = 2704.81<br><i>P</i> = 8.18•10 <sup>-7</sup> | F = 2671.80<br><i>P</i> = 8.38•10 <sup>-7</sup> | F = 2946.82<br><i>P</i> = 6.89•10 <sup>-7</sup> |
| <b>PLE-chloroform</b>        | F = 87.11<br><i>P</i> = 0.001                   | -   | F = 1558.40<br><i>P</i> = 2.48•10 <sup>-6</sup> | F = 937.94<br><i>P</i> = 6.77•10 <sup>-6</sup>  | F = 2260.36<br><i>P</i> = 1.17•10 <sup>-5</sup> | F = 641.72<br><i>P</i> = 1.44•10 <sup>-5</sup>  | F = 552.33<br><i>P</i> = 1.94•10 <sup>-5</sup>  | F = 704.12<br><i>P</i> = 1.20•10 <sup>-5</sup>  | F = 2544.10<br><i>P</i> = 9.25•10 <sup>-7</sup> | F = 2503.56<br><i>P</i> = 9.55•10 <sup>-7</sup> | F = 2843.89<br><i>P</i> = 7.4•10 <sup>-7</sup>  |
| <b>Soxhlet-acetone</b>       | F = 1864.78<br><i>P</i> = 1.72•10 <sup>-6</sup> | F = 1558.40<br><i>P</i> = 2.48•10 <sup>-6</sup> | -   | F = 228.07<br><i>P</i> = 1.1•10 <sup>-4</sup>   | F = 462.53<br><i>P</i> = 2.76•10 <sup>-5</sup>  | F = 464.96<br><i>P</i> = 2.74•10 <sup>-5</sup>  | F = 550.54<br><i>P</i> = 1.96•10 <sup>-5</sup>  | F = 409.17<br><i>P</i> = 3.53•10 <sup>-5</sup>  | F = 974.61<br><i>P</i> = 6.27•10 <sup>-6</sup>  | F = 888.14<br><i>P</i> = 7.55•10 <sup>-6</sup>  | F = 1737.69<br><i>P</i> = 1.98•10 <sup>-6</sup> |
| <b>Macerat-acetone</b>       | F = 1295.51<br><i>P</i> = 3.56•10 <sup>-6</sup> | F = 937.94<br><i>P</i> = 6.77•10 <sup>-6</sup>  | F = 228.07<br><i>P</i> = 1.1•10 <sup>-4</sup>   | -   | F = 1075.96<br><i>P</i> = 5.15•10 <sup>-6</sup> | F = 53.85<br><i>P</i> = 1.84•10 <sup>-3</sup>   | F = 92.31<br><i>P</i> = 6.56•10 <sup>-4</sup>   | F = 33.35<br><i>P</i> = 4.4•10 <sup>-3</sup>    | F = 1584.98<br><i>P</i> = 2.38•10 <sup>-6</sup> | F = 1506.71<br><i>P</i> = 2.63•10 <sup>-3</sup> | F = 2206.48<br><i>P</i> = 1.23•10 <sup>-6</sup> |
| <b>PLE-acetone</b>           | F = 2471.46<br><i>P</i> = 9.80•10 <sup>-7</sup> | F = 2260.36<br><i>P</i> = 1.17•10 <sup>-6</sup> | F = 462.53<br><i>P</i> = 2.76•10 <sup>-5</sup>  | F = 1075.96<br><i>P</i> = 5.15•10 <sup>-6</sup> | -   | F = 1370.97<br><i>P</i> = 3.18•10 <sup>-6</sup> | F = 1460.56<br><i>P</i> = 2.8•10 <sup>-6</sup>  | F = 1308.70<br><i>P</i> = 3.49•10 <sup>-6</sup> | F = 163.77<br><i>P</i> = 2.15•10 <sup>-6</sup>  | F = 116.33<br><i>P</i> = 4.19•10 <sup>-4</sup>  | F = 851.96<br><i>P</i> = 8.2•10 <sup>-6</sup>   |
| <b>Soxhlet-ethyl acetate</b> | F = 996.83<br><i>P</i> = 6.00•10 <sup>-6</sup>  | F = 641.73<br><i>P</i> = 1.44•10 <sup>-5</sup>  | F = 464.96<br><i>P</i> = 2.74•10 <sup>-5</sup>  | F = 53.85<br><i>P</i> = 1.84•10 <sup>-3</sup>   | F = 1370.97<br><i>P</i> = 3.18•10 <sup>-6</sup> | -   | <b>F = 5.44 (b)</b><br><b><i>P</i> = 0.08</b>   | <b>F = 2.52 (c)</b><br><b><i>P</i> = 0.19</b>   | F = 1840.72<br><i>P</i> = 1.76•10 <sup>-6</sup> | F = 1770.34<br><i>P</i> = 1.91•10 <sup>-6</sup> | F = 2384.54<br><i>P</i> = 1.05•10 <sup>-6</sup> |
| <b>Macerat-ethyl acetate</b> | F = 901.50<br><i>P</i> = 7.33•10 <sup>-6</sup>  | F = 552.33<br><i>P</i> = 1.94•10 <sup>-5</sup>  | F = 550.54<br><i>P</i> = 1.96•10 <sup>-5</sup>  | F = 92.31<br><i>P</i> = 6.56•10 <sup>-4</sup>   | F = 1460.56<br><i>P</i> = 0.08                  | <b>F = 5.44 (b)</b><br><b><i>P</i> = 0.02</b>   | -   | <b>F = 15.33 (d)</b><br><b><i>P</i> = 0.02</b>  | F = 1915.49<br><i>P</i> = 1.63•10 <sup>-6</sup> | F = 1847.76<br><i>P</i> = 1.75•10 <sup>-6</sup> | F = 2435.23<br><i>P</i> = 1.01•10 <sup>-6</sup> |
| <b>PLE-ethyl acetate</b>     | F = 1061.63<br><i>P</i> = 5.29•10 <sup>-6</sup> | F = 704.12<br><i>P</i> = 1.2•10 <sup>-5</sup>   | F = 409.17<br><i>P</i> = 3.53•10 <sup>-5</sup>  | F = 33.35<br><i>P</i> = 4.4•10 <sup>-3</sup>    | F = 1308.70<br><i>P</i> = 3.49•10 <sup>-6</sup> | <b>F = 2.52 (c)</b><br><b><i>P</i> = 0.19</b>   | <b>F = 15.33 (d)</b><br><b><i>P</i> = 0.02</b>  | -   | F = 1788.11<br><i>P</i> = 1.87•10 <sup>-6</sup> | F = 1715.93<br><i>P</i> = 2.03•10 <sup>-6</sup> | F = 2348.54<br><i>P</i> = 1.08•10 <sup>-6</sup> |
| <b>Soxhlet-methanol</b>      | F = 2704.81<br><i>P</i> = 8.18•10 <sup>-7</sup> | F = 2544.10<br><i>P</i> = 9.25•10 <sup>-7</sup> | F = 974.61<br><i>P</i> = 6.27•10 <sup>-6</sup>  | F = 1584.98<br><i>P</i> = 2.38•10 <sup>-6</sup> | F = 163.77<br><i>P</i> = 2.15•10 <sup>-6</sup>  | F = 1840.72<br><i>P</i> = 1.76•10 <sup>-6</sup> | F = 1915.49<br><i>P</i> = 1.63•10 <sup>-6</sup> | F = 1788.11<br><i>P</i> = 1.87•10 <sup>-6</sup> | -   | <b>F = 4.50 (e)</b><br><b><i>P</i> = 0.10</b>   | F = 359.00<br><i>P</i> = 4.57•10 <sup>-5</sup>  |
| <b>Macerat-methanol</b>      | F = 2671.80<br><i>P</i> = 8.38•10 <sup>-7</sup> | F = 2503.56<br><i>P</i> = 9.55•10 <sup>-7</sup> | F = 888.14<br><i>P</i> = 7.55•10 <sup>-6</sup>  | F = 1506.71<br><i>P</i> = 2.63•10 <sup>-3</sup> | F = 116.33<br><i>P</i> = 4.19•10 <sup>-4</sup>  | F = 1770.34<br><i>P</i> = 1.91•10 <sup>-6</sup> | F = 1847.76<br><i>P</i> = 1.75•10 <sup>-6</sup> | F = 1715.93<br><i>P</i> = 2.03•10 <sup>-6</sup> | <b>F = 4.50 (e)</b><br><b><i>P</i> = 0.10</b>   | -   | F = 431,08<br><i>P</i> = 3.18•10 <sup>-5</sup>  |
| <b>PLE-methanol</b>          | F = 2946.82<br><i>P</i> = 6.89•10 <sup>-7</sup> | F = 2843.89<br><i>P</i> = 7.4•10 <sup>-7</sup>  | F = 1737.69<br><i>P</i> = 1.98•10 <sup>-6</sup> | F = 2206.48<br><i>P</i> = 1.23•10 <sup>-6</sup> | F = 851.96<br><i>P</i> = 8.2•10 <sup>-6</sup>   | F = 2384.54<br><i>P</i> = 1.05•10 <sup>-6</sup> | F = 2435.23<br><i>P</i> = 1.01•10 <sup>-6</sup> | F = 2348.54<br><i>P</i> = 1.08•10 <sup>-6</sup> | F = 359.00<br><i>P</i> = 4.57•10 <sup>-5</sup>  | F = 431,08<br><i>P</i> = 3.18•10 <sup>-5</sup>  | -   |