Supplementary Materials to accompany:

**Supplementary material S1**

| Acronym | Country | Sample Number | Publication |
|---|---|---|---|
| AL4 | Albania | P1 | |
| AL5 | Albania | P2 | [1] |
| AL6 | Albania | P3 | |
| AL7 | Albania | P4 | |
| AL8 | Albania | P5 | |
| AL9 | Albania | P6 | |
| AL10 | Albania | P7 | |
| AL11 | Albania | 1 | |
| AL12 | Albania | 2 | |
| AL13 | Albania | 3 | |
| AL14 | Albania | 4 | |
| AL15 | Albania | 5 | |
| AL16 | Albania | 6 | |
| AL17 | Albania | 7 | |
| AL18 | Albania | 8 | |
| AL19 | Albania | 9 | |
| AL20 | Albania | 10 | |
| AL21 | Albania | 11 | [2] |
| AL22 | Albania | 12 | |
| AL23 | Albania | 13 | |
| AL24 | Albania | 14 | |
| AL25 | Albania | 15 | |
| AL26 | Albania | 16 | |
| AL27 | Albania | 17 | |
| AL28 | Albania | 18 | |
| AL29 | Albania | 19 | |
| AL30 | Albania | 20 | |
| AL31 | Albania | 21 | |
| AL32 | Albania | 22 | |
| AL33 | Albania | 23 | |
| CR34 | Croazia | P01 | |
| CR35 | Croazia | P02 | |
| CR36 | Croazia | P03 | |

| | | | |
|---|---|---|---|
| CR37 | Croazia | P05 | |
| CR38 | Croazia | P07 | |
| CR39 | Croazia | P08 | |
| CR40 | Croazia | P09 | [3] |
| CR41 | Croazia | P10 | |
| CR42 | Croazia | P11 | |
| CR43 | Croazia | P12 | |
| CR44 | Croazia | P15 | |
| CR45 | Croazia | P16 | |
| CR46 | Croazia | P17 | |
| CR47 | Croazia | P18 | |
| BE48 | Bosnia ed Herzegovina | P19 | |
| BE49 | Bosnia ed Herzegovina | P20 | |
| CR50 | Croazia | P21 | |
| CR51 | Croazia | P22 | |
| CR52 | Croazia | P25 | |
| SE53 | Serbia | P01_Fl_WD | [4] |
| SE54 | Serbia | P01_Fl_SD | |
| SE55 | Serbia | P01_FG_WD | |
| SE56 | Serbia | P01_FG_SD | |
| SE57 | Serbia | P01_ST_WD | |
| SE58 | Serbia | P01_ST_SD | |
| MO59 | Montenegro | A-1_Fg | |
| MO60 | Montenegro | B-1_Fg | |
| MO61 | Montenegro | B-2_Fg | |
| MO62 | Montenegro | B-3_Fg | |
| MO63 | Montenegro | B-4_Fg | |
| MO64 | Montenegro | B-5_Fg | |
| MO65 | Montenegro | B-6_Fg | |
| MO66 | Montenegro | C-1_Fg | |
| MO67 | Montenegro | C-2_Fg | [5] |
| SE68 | Serbia | D-1_Fg | |
| SE69 | Serbia | D-2_Fg | |
| MO70 | Montenegro | A-1_Fl | |
| MO71 | Montenegro | B-2_Fl | |
| MO72 | Montenegro | B-3_Fl | |
| MO73 | Montenegro | B-4_Fl | |
| MO74 | Montenegro | B-5_Fl | |
| MO75 | Montenegro | B-6_Fl | |
| MO76 | Montenegro | C-1_Fl | |
| MO77 | Montenegro | C-2_Fl | |

| | | | |
|---|---|---|---|
| CR78 | Croazia | 79 | [6] |
| CR79 | Croazia | 101 | |
| CR80 | Croazia | 109 | |
| CR81 | Croazia | 126 | |
| SL82 | Slovenia | P01 | |
| SL83 | Slovenia | P02 | |
| CR84 | Croazia | P03 | |
| CR85 | Croazia | P04 | |
| CR86 | Croazia | P05 | |
| CR87 | Croazia | P06 | |
| CR88 | Croazia | P07 | |
| CR89 | Croazia | P08 | [7] |
| BE90 | Bosnia ed Herzegovina | P09 | |
| BE91 | Bosnia ed Herzegovina | P10 | |
| BE92 | Bosnia ed Herzegovina | P11 | |
| BE93 | Bosnia ed Herzegovina | P12 | |
| MO94 | Montenegro | P13 | |
| MA95 | Macedonia | P14 | |
| MA96 | Macedonia | P15 | |
| MA97 | Macedonia | P16 | |
| SE98 | Serbia | P17 | |
| SE99 | Serbia | P18 | |
| MO100 | Montenegro | P01 | |
| MO101 | Montenegro | P02 | |
| MO102 | Montenegro | P03 | |
| MO103 | Montenegro | P04 | |
| MO104 | Montenegro | P05 | [8] |
| MO105 | Montenegro | P06 | |
| MO106 | Montenegro | P07 | |
| MO107 | Montenegro | P08 | |
| MO108 | Montenegro | P09 | |
| MO109 | Montenegro | P10 | |
| MO110 | Montenegro | P11 | |
| MO111 | Montenegro | P12 | |
| | | | [9] |
| IT112 | Italia | | |

**Supplementary material S2**.

*Pearson'*s correlation between essential oil constituents and biological activities.

| | AChE Test | BChE Test | DPPH Test | ABTS Test | β-carotene Test | | FRAP Test |
|---|---|---|---|---|---|---|---|
| | | | | | 30 min | 60 min | |
| Thujene | −0.98 *** | 0.94 *** | −0.26 ns | −0.22 ns | 0.30 ns | −0.42 ns | 0.66 ns |
| α-Pinene | 0.50 ns | −0.34 ns | 1.00 *** | 0.88 ** | −0.92 *** | −0.42 ns | −1.00 *** |
| Camphene | 0.93 *** | −0.85 ** | 0.45 ns | 0.41 ns | −0.48 ns | 0.23 ns | −0.80 * |
| Sabinene | −0.96 *** | 0.90 *** | −0.35 ns | −0.30 ns | 0.38 ns | −0.33 ns | 0.73 ns |
| β-Pinene | 0.99 ns | 0.25 ns | 0.99 *** | 0.99 *** | −0.98 *** | −0.86 ** | −0.82 ** |
| Myrcene | 0.04 ns | 0.14 ns | 1.00 *** | 1.00 *** | −1.00 *** | −0.80 ** | −0.87 ** |
| α-Phellandrene | 0.99 *** | −0.94 *** | 0.24 ns | 0.20 ns | −0.28 ns | 0.44 ns | −0.64 ns |
| α-Terpinene | −0.33 ns | 0.17 ns | −0.86 ** | −0.85 ** | 0.87 ** | 0.50 ns | 0.88 ** |
| Limonene | 0.99 *** | −1.00 *** | −0.07 ns | −0.12 ns | 0.04 ns | 0.70 * | −0.37 ns |
| 1.8-Cineole | −0.48 ns | 0.31 ns | −0.92 *** | −0.90 ** | 0.93 *** | 0.45 ns | 1.00 *** |
| (*Z*)-β-Ocimene | −0.78 * | 0.88 ** | 0.55 ns | 0.59 ns | −0.52 ns | −0.96 *** | −0.12 ns |
| (*E*)-β-Ocimene | −0.75 * | 0.87 ** | 0.58 ns | 0.62 ns | −0.55 ns | −0.95 *** | −0.16 ns |
| γ-Terpinene | −0.41 ns | 0.24 ns | −0.94 *** | −0.93 *** | 0.96 *** | 0.51 ns | 0.99 *** |
| Terpinolene | 0.88 ** | −0.96 *** | −0.37 ns | −0.41 ns | 0.33 ns | 0.88 ** | −0.08 ns |
| Linalool | 0.99 *** | −1.00 *** | −0.02 ns | −0.06 ns | −0.02 ns | 0.65 ns | −0.43 ns |
| Camphor | 0.82 ** | 0.82 *** | -0.50 ns | -0.54 ns | 0.47 ns | 0.94 *** | 0.07 ns |
| Borneol | 0.96 *** | 0.96 *** | 0.35 ns | 0.40 ns | −0.32 ns | −0.87 ** | 0.10 ns |
| Terpinen-4-ol | 0.71 * | −0.83 ** | −0.64 ns | −0.67 * | 0.61 ns | 0.98 *** | 0.23 ns |
| α-Terpineol | 0.07 ns | −0.26 ns | −0.99 *** | −0.99 *** | 0.98 *** | 0.86 ** | 0.81 ** |
| (−)-Bornyl acetate | 0.88 ** | −0.95 *** | −0.40 ns | −0.44 ns | 0.36 ns | 0.89 ** | −0.05 ns |
| α-Cubebene | 0.85 ** | −0.74 * | 0.60 ns | 0.56 ns | −0.63 ns | 0.06 ns | −0.89 ** |
| α-Ylangene | −0.24 ns | 0.42 ns | 0.94 *** | 0.96 *** | −0.93 *** | −0.94 *** | −0.70 * |
| α-Copaene | 0.06 ns | −0.24 ns | −0.99 *** | −0.99 *** | 0.98 *** | 0.85 ** | 0.82 ** |
| β-Cubebene | −0.15 ns | 0.33 ns | 0.97 *** | 0.98 *** | −0.96 *** | −0.90 ** | −0.77 * |
| β-Bourbonene | 0.13 ns | −0.31 ns | −0.98 *** | −0.99 *** | 0.97 *** | 0.89 ** | 0.78 * |
| α-Bergamotene | −0.15 ns | 0.33 ns | 0.97 *** | 0.98 *** | −0.96 *** | −0.89 ** | −0.77 * |
| α-Gurjunene | 0.75 * | −0.86 ** | −0.60 ns | −0.63 ns | 0.57 ns | 0.97 *** | 0.18 ns |
| *trans*-Caryophyllene | 0.99 *** | −0.96 *** | 0.20 ns | 0.15 ns | −0.24 ns | 0.48 ns | −0.61 ns |
| Aromadendrene | −0.25 ns | 0.42 ns | 0.94 *** | 0.96 *** | −0.93 *** | −0.94 *** | −0.70 * |
| β-Farnesene | 0.63 ns | −0.48 ns | 0.83 ** | 0.80 ** | −0.85 ** | −0.28 ns | −0.99 *** |
| α-Humulene | −0.96 *** | 0.89 ** | -0.37 ns | −0.32 ns | 0.40 ns | −0.32 ns | 0.74 * |
| *allo*-Aromadendrene | −.01 ns | 0.20 ns | 0.99 *** | 1.00 *** | −0.99 *** | −0.83 ** | −0.85 ** |
| β-Selinene | 0.03 ns | −0.47 ns | −0.92 *** | −0.94 *** | 0.91 *** | 0.96 *** | 0.66 ns |
| Germacrene D | −0.06 ns | −0.25 ns | −0.99 *** | −0.99 *** | 0.98 *** | 0.86 ** | 0.82 ** |
| γ-Muurolene | −0.37 ns | 0.53 ns | 0.89 ** | 0.92 *** | −0.87 ** | −0.97 *** | −0.60 ns |
| δ-Cadinene | −0.36 ns | 0.53 ns | 0.89 ** | 0.91 *** | −0.88 ** | −0.97 *** | −0.61 ns |
| Spathulenol | −0.39 ns | −0.22 ns | −0.95 *** | −0.93 *** | 0.96 *** | 0.53 ns | 0.99 *** |
| Caryophyllene oxide | −0.57 ns | −0.71 * | −0.75 * | −0.77 * | 0.73 * | 0.99 *** | 0.39 ns |
| Viridiflorol | −0.94 *** | 0.86 ** | −0.43 ns | −0.39 ns | 0.46 ns | −0.25 ns | 0.78 * |
| Calarene | −0.11 ns | −0.07 ns | −1.00 *** | −1.00 *** | 1.00 *** | 0.75 ns | 0.91 *** |
| Manoyl oxide | 0.03 ns | −0.22 ns | −0.99 *** | −1.00 *** | 0.99 *** | 0.84 ** | 0.83 ** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Manool | −0.02 $^{ns}$ | −0.20 $^{ns}$ | −0.99 $^{***}$ | −1.00 $^{***}$ | 0.99 $^{***}$ | 0.83 $^{**}$ | 0.84 $^{**}$ |
| Sclareol | −0.87 $^{**}$ | 0.73 $^{*}$ | −0.58 $^{ns}$ | −0.54 $^{ns}$ | 0.61 $^{ns}$ | −0.08 $^{ns}$ | 0.88 $^{**}$ |

$^{ns}$ Not significant. * Significant at $p < 0.05$. ** Significant at $p < 0.01$. *** Significant at $p < 0.001$.

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