Supplementary materials for:

Anti-hypochlorite, antioxidant, and catalytic activity of three polyphenol-rich *super-foods* investigated with use of coumarin-based sensor

Karolina Starzak ^{1*}, Tomasz Świergosz¹, Arkadiusz Matwijczuk², Bernadette Creaven³, Janusz Podleśny⁴ and Dariusz Karcz^{1*}

- ¹ Department of Analytical Chemistry (C1), Faculty of Chemical Engineering and Technology, Cracow University of Technology, Warszawska 24, 31-155 Cracow, Poland; karolina.starzak@pk.edu.pl, tomasz.swiergosz@pk.edu.pl, dariusz.karcz@pk.edu.pl
- ² Department of Biophysics, University of Life Sciences in Lublin, Akademicka 13, 20-950 Lublin, Poland; arkadiusz.matwijczuk@up.lublin.pl
- ³ School of Chemical and Pharmaceutical Sciences, Technological University Dublin, Kevin St., Dublin 2, Ireland; Bernie.Creaven@tudublin.ie
- ⁴ Institute of Soil Science and Plant Cultivation State Research Institute, Puławy, Poland; jp@iung.pulawy.pl
- * Correspondence: karolina.starzak@pk.edu.pl (K.S); dariusz.karcz@pk.edu.pl (D.K);



Figure S1. Decrease of ABTS^{+•} absorbance measured at λ_{max} 734 nm in the presence of increasing concentration of selected reagents after 30 min of reaction at pH 3 at 25 °C.



Figure S2. Decrease of ABTS^{+•} absorbance measured at λ_{max} 734 nm in the presence of increasing concentration of selected reagents after 30 min of reaction at pH 5 at 25 °C.



Figure S3. Decrease of fluorescence intensity of 150 μ M of 7-DCCA probe (λ_{Ex} 289 nm, λ_{Em} 460 nm) under the presence of aqueous berries extracts (4 mg/mL) incubated with increasing concentration of NaOCl for 15 min at pH 3.



Figure S4. Decrease of fluorescence intensity of 150 μ M of 7-DCCA probe (λ_{Ex} 289 nm, λ_{Em} 460 nm) under the presence of aqueous berries extracts (4 mg/mL) incubated with increasing concentration of NaOCl for 15 min at pH 5.



Figure S5. LC-MS (SIM) chromatogram recorded in negative mode, of an aqueous extracts of goji and schisandra berries compared with standard solution of phloretin.



Figure S6. LC-MS (SIM) chromatogram recorded in negative mode, of an aqueous extracts of acai, goji and schisandra berries compared with standard solution of chlorogenic acid.



Figure S7. LC-MS (SIM) chromatogram recorded in negative mode, of an aqueous extracts of acai, goji and schisandra berries compared with standard solution of salicylic acid.



Figure S8. LC-MS (SIM) chromatogram recorded in negative mode, of an aqueous extracts of acai, goji and schisandra berries compared with standard solution of 2,4-diOH-benzoic acid.



Figure S9. LC-MS (SIM) chromatogram recorded in negative mode, of an aqueous extracts of acai, goji and schisandra berries compared with standard solution of rutin.