

SUPPLEMENTARY MATERIALS

Enrichment in Antioxidant Flavonoids of Stamen Extracts from *Nymphaea lotus* L. using Ultrasonic-Assisted Extraction and Macroporous Resin Adsorption

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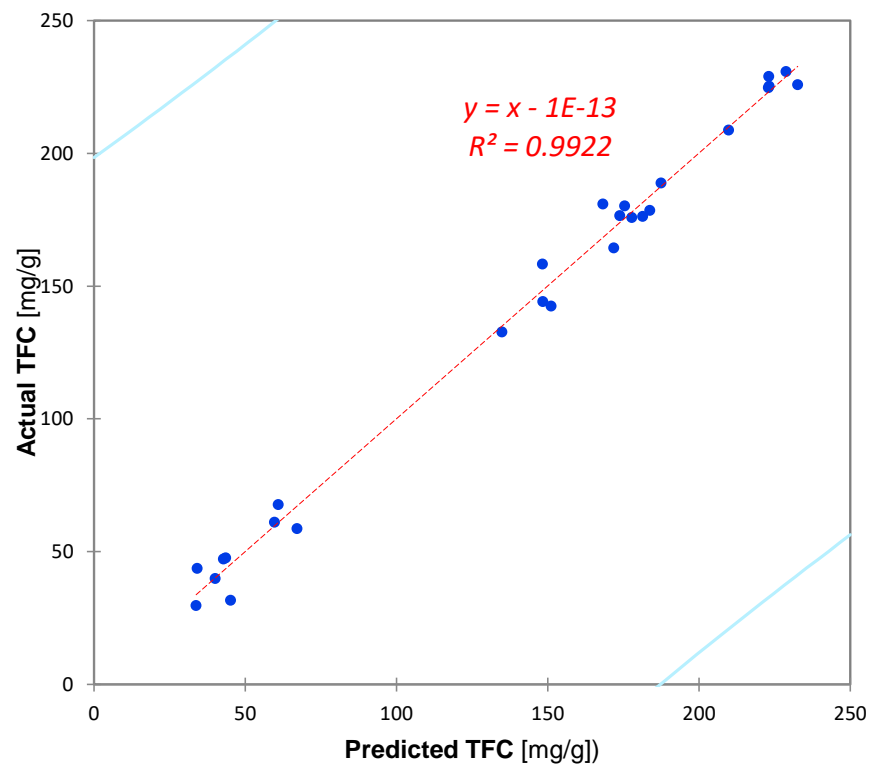
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Figure S1: Biplot representation of the linear relation between predicted vs. measured TFC in the 27 *N. lotus* sample extracts.



Light blue lines represented 95% confidence interval.

Figure S2: Normalized coefficients representation with the 95% CI for the proposed polynomial model.

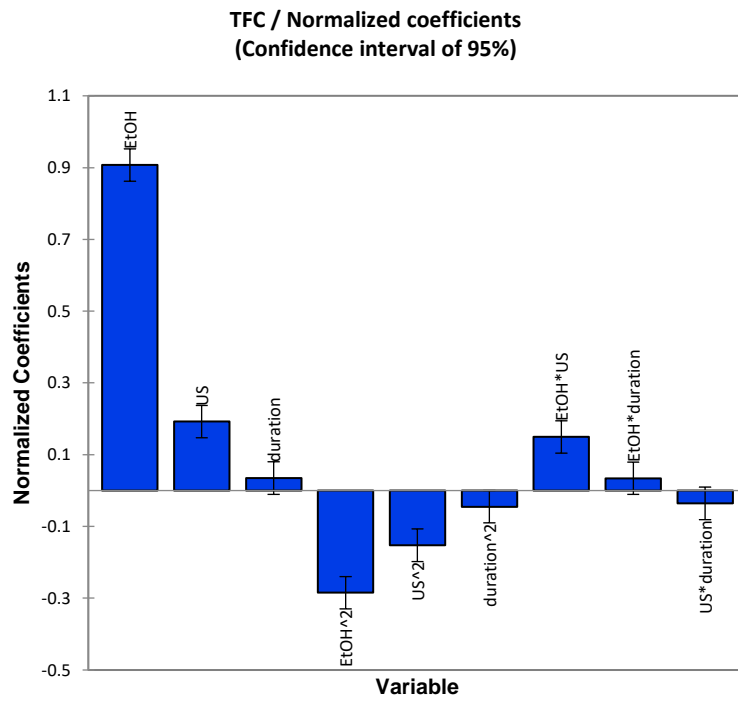


Table S1: Conductivity and total reducing sugar contents in the different extracts from *N. lotus* stamen.

Extract	Conductivity ($\mu\text{S}/\text{cm}$)	Reducing sugar content (AU/mL^1)
HRE	0.039 ± 0.005	0.056 ± 0.011
USAE	0.122 ± 0.010	0.065 ± 0.010
MPR	0.044 ± 0.012	0.007 ± 0.006

¹ AU/mL: expressed in absorbance unit per mL of extract; HRE: *N. lotus* extract obtained by HRE; USAE: *N. lotus* extract obtained by USAE; MPR: *N. lotus* extract obtained by USAE followed by DAX-8 MPR purification step.

Table S2: Characteristic and tentative identification of flavonoids from *N. lotus* stamen extract

Peak number	Retention time (min)	λ_{max} (nm)	[M-H] ⁻	Tentative identification	Commercial standard	Reference
1	29.11	263,349	479	Myr 3-O-Gal	+ (ES)	Zhu et al., 2012
2	31.67	254,305,366	449	Myr 3'-O-Xyl	-	Zhu et al., 2012
3	32.26	257,348	447	Que-3-O-Rha	+ (SA)	Zhu et al., 2012; Yin et al., 2015
4	32.87	250,366	433	CNar-2''-O-Gal	-	Zhu et al., 2012; Yin et al., 2015
5	33.52	265,343	447	Kae-3-O-Gal	+ (SA)	Zhu et al., 2012
6	33.91	254,366	433	Que-3'-O-Xyl	+ (SA)	Zhu et al., 2012
7	34.71	268,350	477	Iso-7-O-Gal	-	Zhu et al., 2012; Yin et al., 2015
8	35.51	252,268,352	447	Iso-7-O-Xyl	-	Zhu et al., 2012; Yin et al., 2015
9	36.57	265, 343	447	Iso-3-O-Xyl	-	Yin et al., 2015

Myr: myricetin; Que: quercetin; CNar: chalcononaringenin; Kae: kaempferol; Iso: isorhamnetin; Gal: galactoside; Xyl: xyloside; Rha: rhamnoside. Standards: + = available; - = not available; ES = commercial standard from Extrasynthese (Genay, France); SA = commercial standard from Sigma-Aldrich (Saint-Quentin Fallavier, France); Commercial standards from Sigma-Aldrich (Saint-Quentin Fallavier, France): Que-3-O-Rha, phyproof[®] Reference Substance, with purity $\geq 95.0\%$ (HPLC); Que-3'-O-Xyl with purity $\geq 97.0\%$ (HPLC); Kae-3-O-Gal with purity $\geq 90\%$ (LC/MS-ELSD); Commercial standard from Extrasynthese (Genay, France): Myr 3-O-Gal with purity $\geq 99\%$ (HPLC). References: Zhu et al., 2012 (reference 14, main manuscript): Zhu, M., Zheng, X., Shu, Q., Li, H., Zhong, P., Zhang, H., ... & Wang, L. (2012). Relationship between the composition of flavonoids and flower colors variation in tropical water lily (*Nymphaea*) cultivars. *PLoS one*, 7(4); Yin et al., 2015 (reference 4, main manuscript): Yin, D. D., Yuan, R. Y., Wu, Q., Li, S. S., Shao, S., Xu, Y. J., ... & Wang, L. S. (2015). Assessment of flavonoids and volatile compounds in tea infusions of water lily flowers and their antioxidant activities. *Food chemistry*, 187, 20-28.