

Ultrasound-Based Recovery of Anti-Inflammatory and Antimicrobial Extracts of the Acidophilic Microalga *Coccomyxa onubensis*

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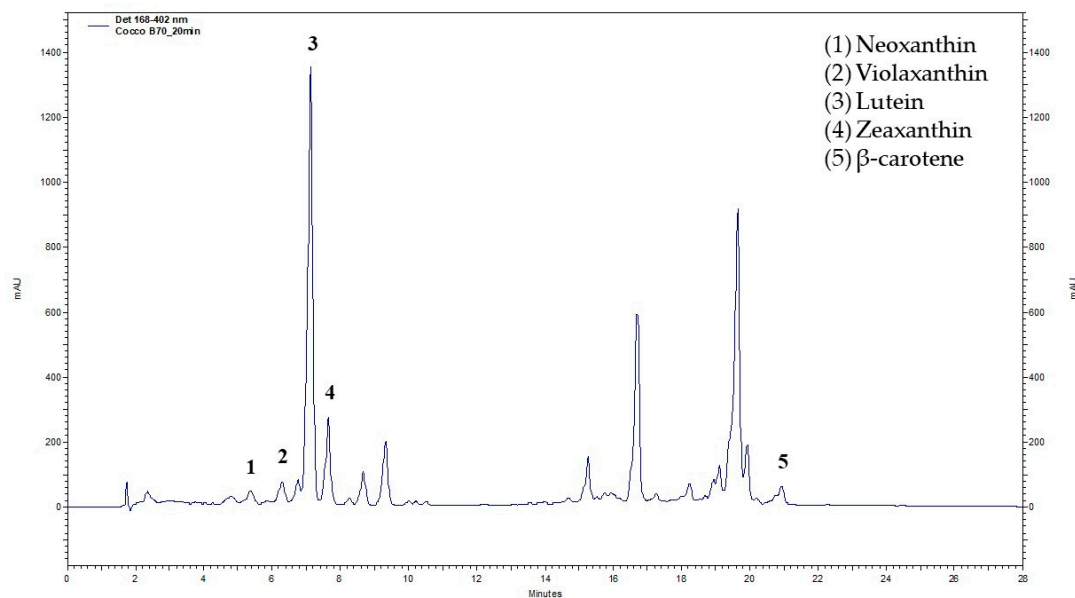


Figure S1. HPLC profile of main carotenoids presents in *C. onubensis*

Table S1. Regression coefficients and p-Value for Extraction yield and lutein recovery in their original units and statistics for the fit obtained by multiple linear regression using ultrasonic bath equipment.

Terms of the model	Extraction yield		Lutein Recovery	
	<i>Estimate</i>	<i>P-Value</i>	<i>Estimate</i>	<i>P-Value</i>
constant	29.5221		119.818	
A: T	7.09833	0.0000*	20.5667	0.0285*
B: t	2.12833	0.0028*	9.88333	0.2030
T × T	-1.29026	0.0845	8.51895	0.4495
T × t	-0.3175	0.5361	-7.505	0.4056
T × t	-5.69026	0.0002*	-27.3511	0.0464*
Statistic for the goodness of fit of the model				
R ²	0.989558		R ²	0.793382
adjusted R ²	0.979115		adjusted R ²	0.586764
RSD	0.370359		RSD	9.39499
P	0.2282		P	0.0471

Note: R²–determination coefficient, adjusted R², RSD–residual standard deviation, P-value of the lack-of-fit test for the model; * - significant coefficients of the model, T–Temperature (°C), and t – extraction time (min)

Table S2. Regression coefficients and p-Value for extraction yield lutein recovery in their original units and statistics for the fit obtained by multiple linear regression using ultrasonic probe equipment.

Terms of the model	Extraction yield		Lutein Recovery	
	<i>Estimate</i>	<i>P-Value</i>	<i>Estimate</i>	<i>P-Value</i>
constant	15.4821		60.4063	
A: Pi	-0.188333	0.3668	11.335	0.0348*
B: t	1.01833	0.0030*	4.34333	0.3207
Pi × Pi	0.899737	0.0275	12.3692	0.0970
Pi × t	0.205	0.4184	-10.615	0.0792
T × t	-0.0702632	0.8195	-14.8358	0.0582
Statistic for the goodness of fit of the model				
R ²	0.849697		R ²	0.817347
adjusted R ²	0.779571		adjusted R ²	0.634695
RSD	0.26075		RSD	5.13633
P	0.1167		P	0.1087

Note: R²—determination coefficient, adjusted R², RSD—residual standard deviation, P-value of the lack-of-fit test for the model; * - significant coefficients of the model, Pi—Pulse interval (s/s), and t – extraction time (min)