

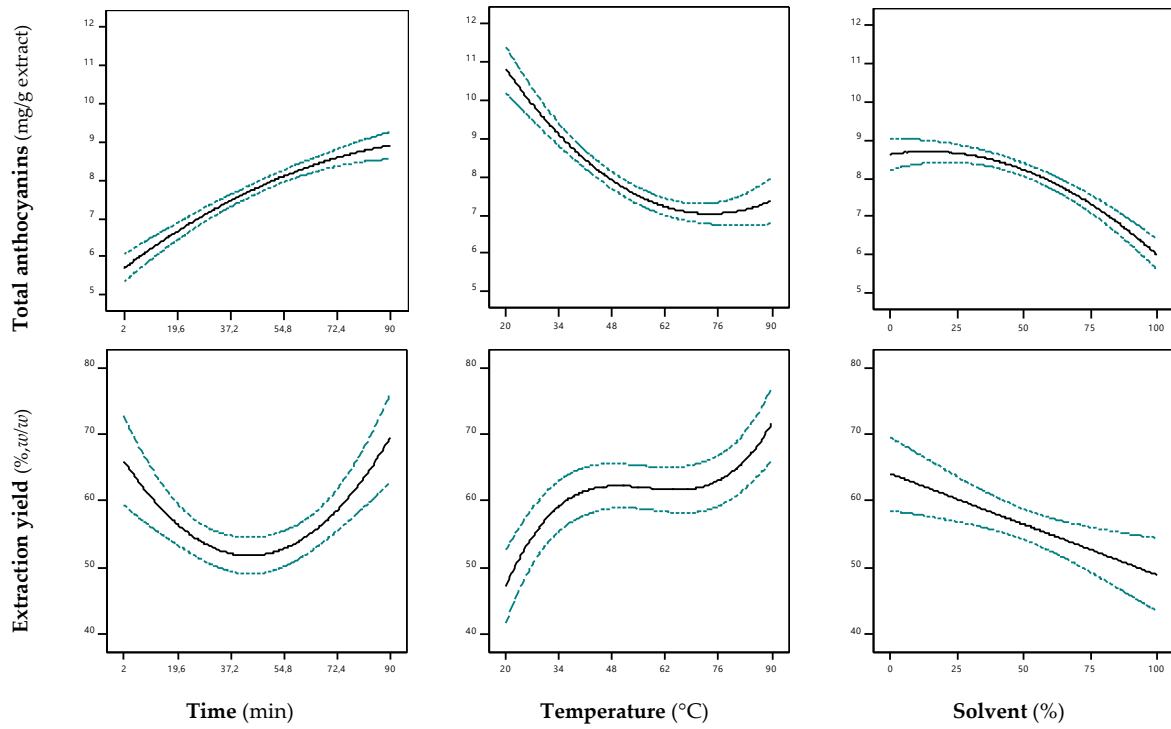
Supplementary Material

Table S1: Parametric values of the polynomial equations and statistical information of the model fitting procedure for both extraction processes. Parametric superscripted 1, 2 and 3 stand for the variables time (*t*), temperature or ultrasonic power (*T* or *P*), and solvent (*S*), respectively.

Effect	Heat-Assisted Extraction (HAE)				Ultrasound-Assisted Extraction (UAE)			
	Yield	C3S	C3G	Total	Yield	C3S	C3G	Total
<i>b</i> ₀	52.3±0.6	4.67±0.04	2.97±0.02	7.66±0.05	63±2	4.30±0.03	2.85±0.02	7.22±0.05
<i>b</i> ₁	ns	-0.36±0.04	0.21±0.03	-0.28±0.05	ns	0.12±0.04	0.12±0.02	0.12±0.05
<i>b</i> ₂	-4±1	-0.21±0.03	-0.10±0.01	-0.32±0.03	10±1	-0.27±0.06	0.11±0.02	0.36±0.05
<i>b</i> ₃	ns	ns	ns	ns	ns	-0.27±0.03	0.14±0.02	-0.26±0.05
<i>b</i> ₁₁	2.9±0.5	-0.12±0.03	-0.13±0.01	-0.18±0.03	ns	ns	0.07±0.01	ns
<i>b</i> ₂₂	ns	ns	ns	ns	-9±1	ns	ns	ns
<i>b</i> ₃₃	ns	-0.19±0.03	-0.12±0.01	-0.32±0.03	-5±1	0.21±0.02	0.04±0.01	0.32±0.03
<i>b</i> ₁₂	ns	-0.24±0.04	-0.23±0.02	-0.54±0.04	ns	0.30±0.03	0.14±0.02	0.47±0.04
<i>b</i> ₁₃	-1.6±0.7	-0.50±0.04	-0.24±0.02	-0.67±0.04	ns	0.16±0.03	0.14±0.02	0.33±0.04
<i>b</i> ₂₃	-2.6±0.7	0.21±0.04	0.14±0.02	0.28±0.04	-5±2	0.10±0.03	0.05±0.02	0.18±0.04
<i>b</i> ₁₁₁	ns	ns	-0.14	ns	ns	ns	ns	ns
<i>b</i> ₂₂₂	ns	ns	ns	ns	ns	0.18±0.03	ns	ns
<i>b</i> ₃₃₃	2.9±0.6	ns	ns	ns	ns	ns	ns	ns
<i>b</i> ₁₂₃	ns	ns	ns	-0.18±0.04	ns	ns	ns	ns
<i>b</i> ₁₁₂	ns	ns	ns	ns	ns	ns	-0.25±0.03	-0.62±0.07
<i>b</i> ₁₁₃	-3±1	ns	ns	ns	ns	ns	-0.30±0.03	-0.22±0.07
<i>b</i> ₁₂₂	ns	0.35±0.05	ns	0.45±0.07	ns	-0.57±0.03	-0.41±0.03	-0.89±0.07
Statistics								
Model F-value	14.81	46.44	102.09	61.98	15.91	53.09	51.48	76.62
Lack of Fit	ns	ns	ns	ns	ns	ns	ns	ns
R ²	0.9303	0.9810	0.9892	0.9884	0.9349	0.9833	0.9888	0.9924
R ² _{adj}	0.8674	0.9599	0.9795	0.9725	0.8759	0.9648	0.9696	0.9795
Ad. Precision	14.86	23.68	38.23	30.20	12.05	31.77	30.21	40.08
C.V. (%)	3.46	2.29	1.59	1.71	9.55	2.12	1.79	1.59

C3S: cyanidin-3-*O*-sophoroside; C3G: cyanidin-3-*O*-glucoside; Total: total anthocyanin content (C3S + C3G). R²: coefficient of determination; R²_{adj}: adjusted coefficient of determination; Ad. Precision: adequate precision; C.V.: coefficient of variation.

Heat-Assisted Extraction



Ultrasound-Assisted Extraction

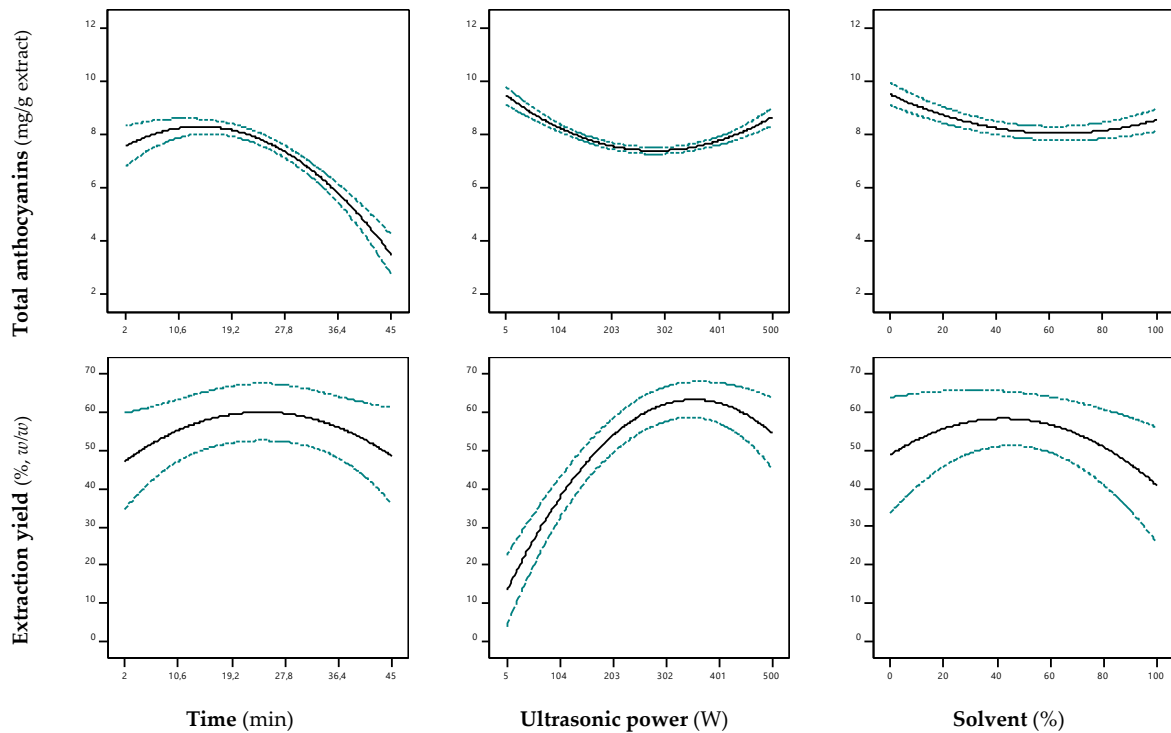


Figure S1: 2D response graphs for the effects of the independent variables on the extraction yield (% w/w) and total anthocyanins content (mg/g extract) obtained from red raspberry by HAE and UAE when maximizing all responses simultaneously. In each graph, the excluded variables were fixed at their global optimal value (Table 3).