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SUPPLEMENTARY MATERIAL TO

Accelerated solvent extraction of bioactive compounds from carrot – Optimization of response surface methodology

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TABLE S-I. Analysis of variance (ANOVA) of the modelled responses

Source	Sum of squares	Degree of freedom	Mean square	F-value	p-value
Total carotenoids					
Model	769.43	9	85.49	56.23	0.0002
Residual	7.60	5	1.52		
Lack of fit	6.48	3	2.16	3.86	0.2125
Pure error	1.12	2	0.56		
Total	777.03	14			
$R^2 = 0.9902$					
Total polyphenols					
Model	2.186×10^5	9	31283.51	31.37	0.0007
Residual	4985.76	5	997.15		
Lack of fit	2160.03	3	720.01	0.51	0.7148
Pure error	2825.73	2	1412.86		
Total	2.865×10^5	14			
$R^2 = 0.9826$					
Radical scavenging activity					
Model	6.595×10^6	9	7.327×10^5	11.05	0.0083
Residual	3.316×10^5	5	66322.68		
Lack of fit	3.131×10^5	3	1.044×10^5	11.28	0.0825
Pure error	18498.81	2	9249.41		
Total	6.926×10^6	14			
$R^2 = 0.9521$					
Reducing power					
Model	1.653×10^6	9	1.836×10^5	76.97	< 0.0001
Residual	11929.02	5	2385.80		
Lack of fit	8302.39	3	2767.46	1.53	0.4194
Pure error	3626.63	2	1813.31		
Total	1.665×10^6	14			
$R^2 = 0.9928$					

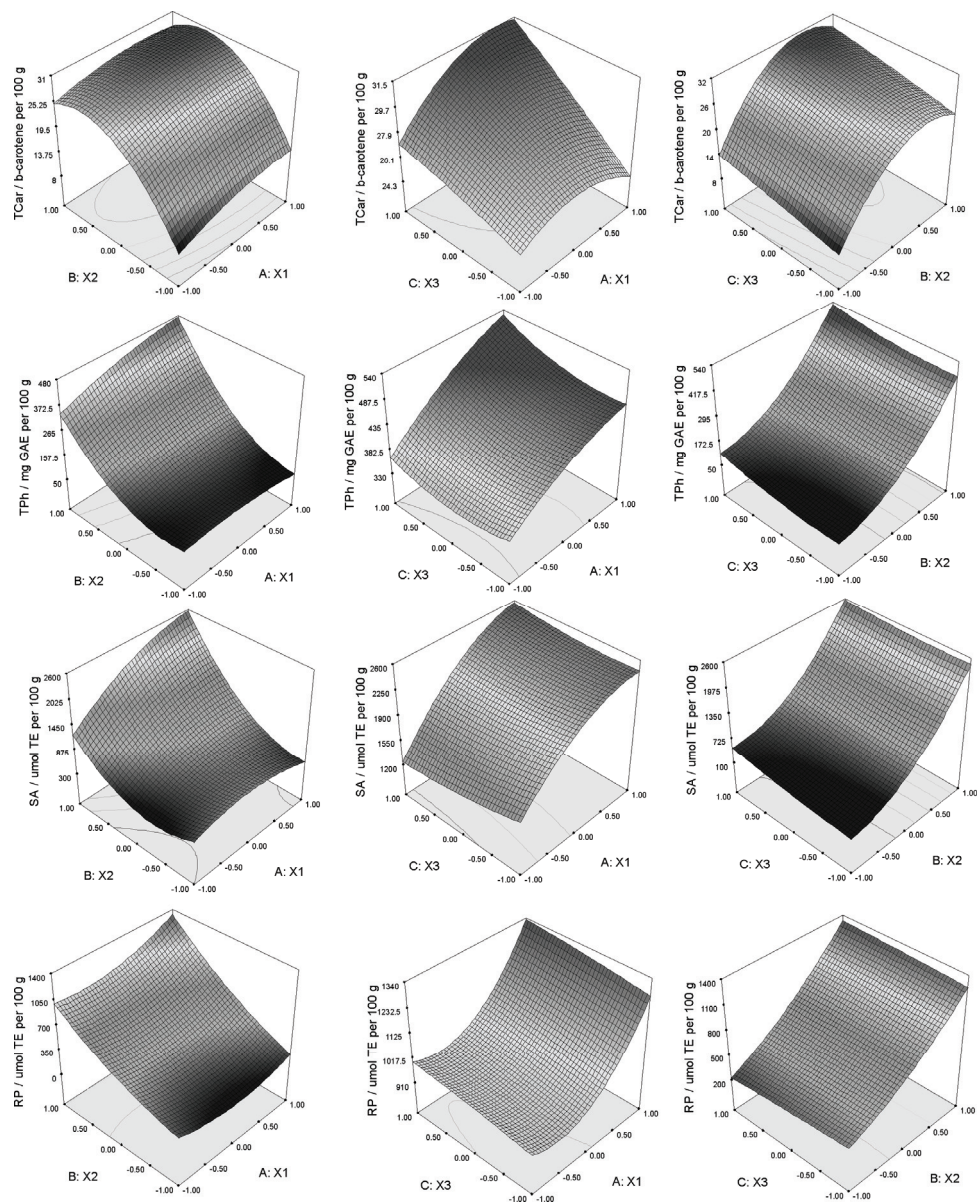* Corresponding author. E-mail: vesnat@uns.ac.rs

Fig. S-1. Single response optimization of the influence of extraction parameters on the total carotenoid contents (*TCar*), total polyphenol contents (*TPh*), scavenging activity (*SA*) and reducing power (*RP*) of carrot extracts.
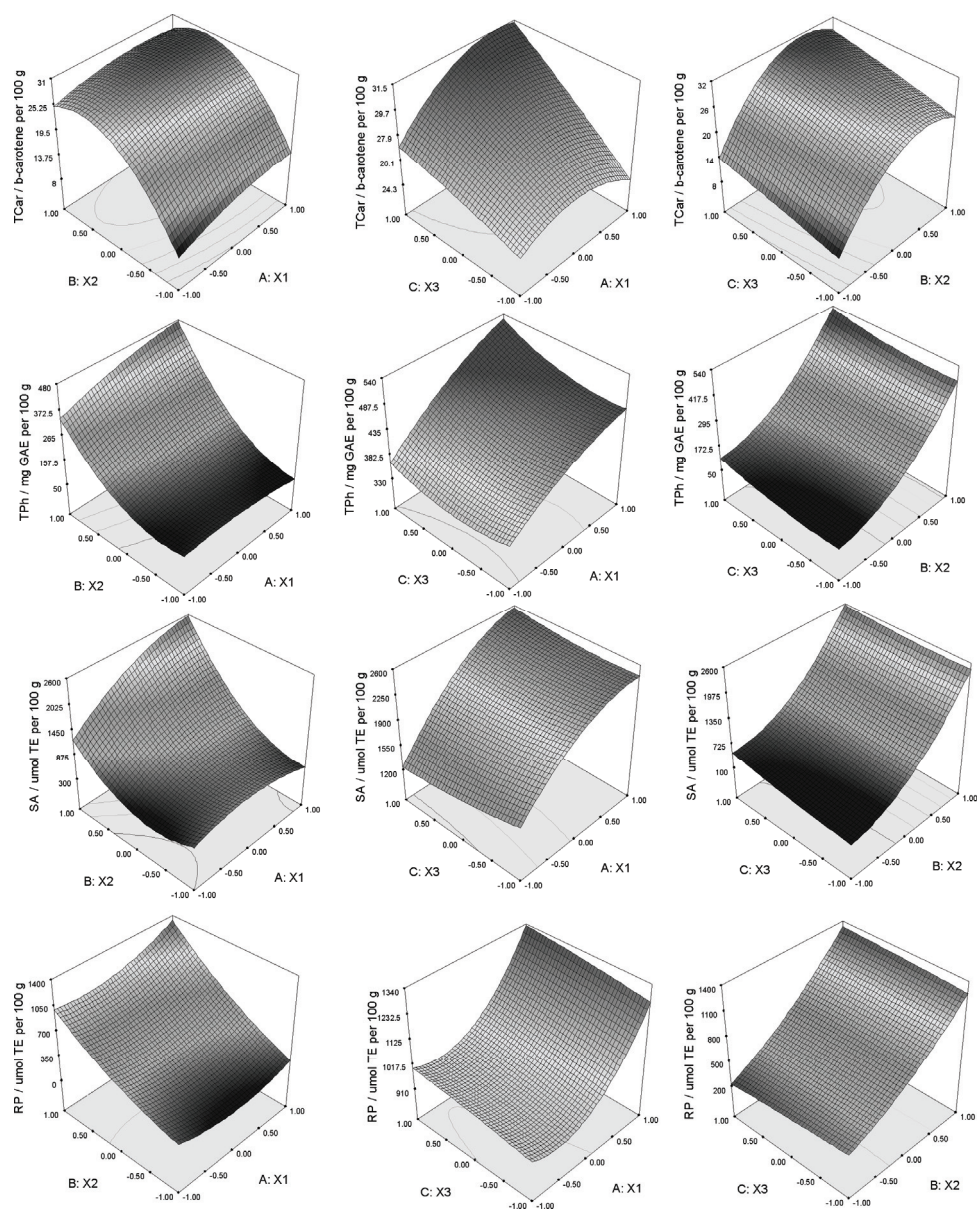
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Fig. S-2. Multi response optimization of the influence of the extraction parameters on the total carotenoid contents (*TCar*), total polyphenol contents (*TPh*), scavenging activity (*SA*) and reducing power (*RP*) of carrot extracts.