**Effect of Microwave-Assisted Extraction on Polyphenols Recovery from Tomato Peel Waste**

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**Total phenols content**

**Total flavonoids content**

**Total phenols content**

Briefly, 400 L of the tomato peel extract was put into a 10 mL volumetric flask, and 4 mL of distilled water and 520 L of 0.2 M Folin-Ciocalteu reagens were added. Five minutes later, 1.5 mL of saturated (20 % *w*/*v*) sodium carbonate solution was added to the mixture and it was topped up with distilled water. After 2 hours, the absorbance of the prepared samples was measured at 765 nm in a 1 cm path-length quartz cell thermostated at 25.0 (± 0.1) °C on a PerkinElmer *λ*-25 Spectrophotometer.

For the preparation of a calibration curve, gallic acid was used as standard and linear regression equitation with *R*2 = 0.9998 was:

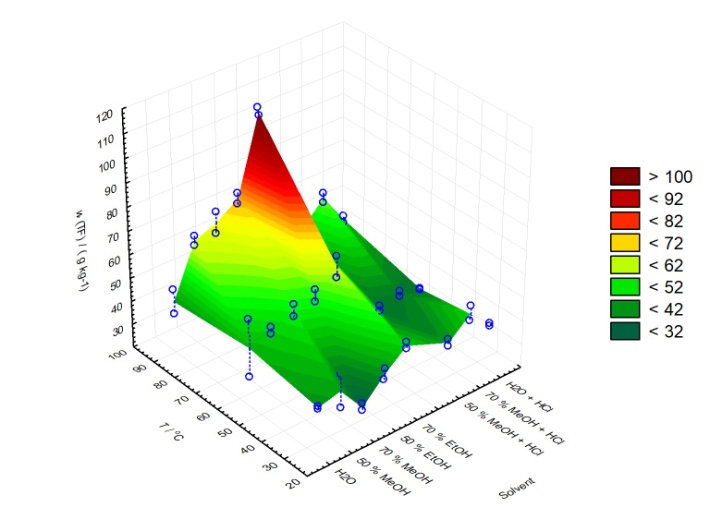
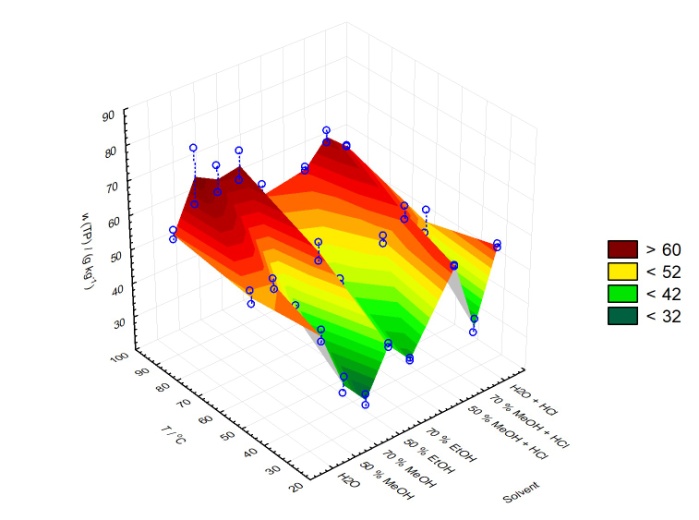
*A*765 = 0.00374 × ** (gallic acid)/(mg L-1) (1)

**Total flavonoids content**

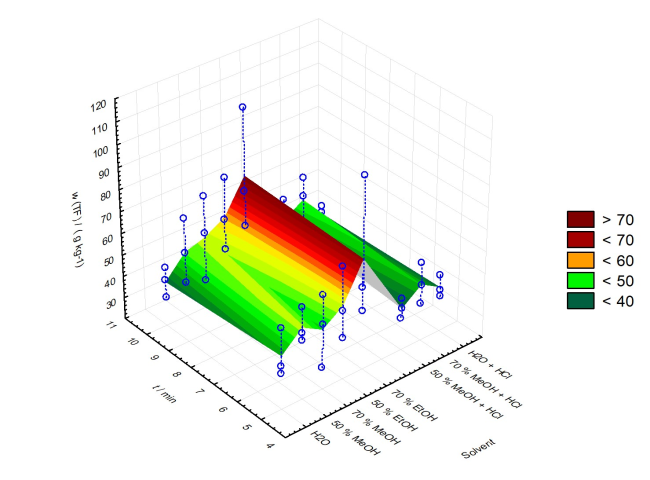
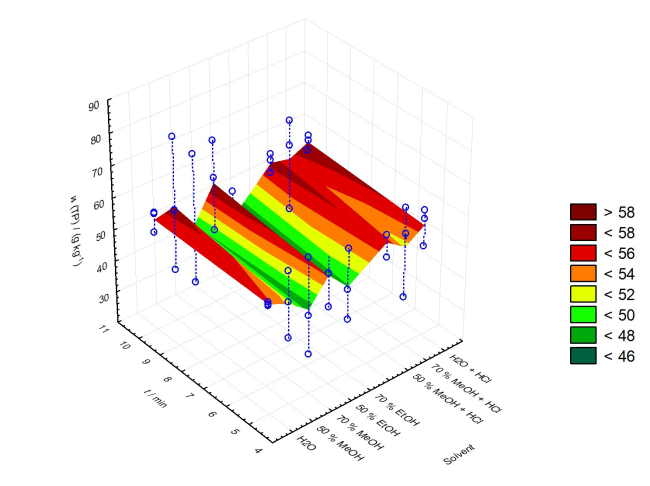
Briefly, 1 mL of the tomato peel extract was put into a 10 mL volumetric flask, and 2 mL of distilled water and 0.3 mL of 5 % (*w*/*v*) NaNO2 were added. Five minutes later, 0.5 mL of aluminum chloride 10 % (*w*/*v*) solution was added to the mixture, and after another 6 minutes, 2 mL of NaOH was added and it was topped up with distilled water. Absorbance of the prepared samples was measured at 510 nm in a 1 cm path-length quartz cell thermostated at 25.0 (± 0.1) °C on a PerkinElmer *λ*-25 Spectrophotometer.

For the preparation of a calibration curve, methanol solution of rutin (1 mg L-1) was used as a standard. Linear regression equation with *R*2 = 0.9958 was:

*A*510 = 1.0994·10-4 × ** (rutin)/(mg L-1) (2)

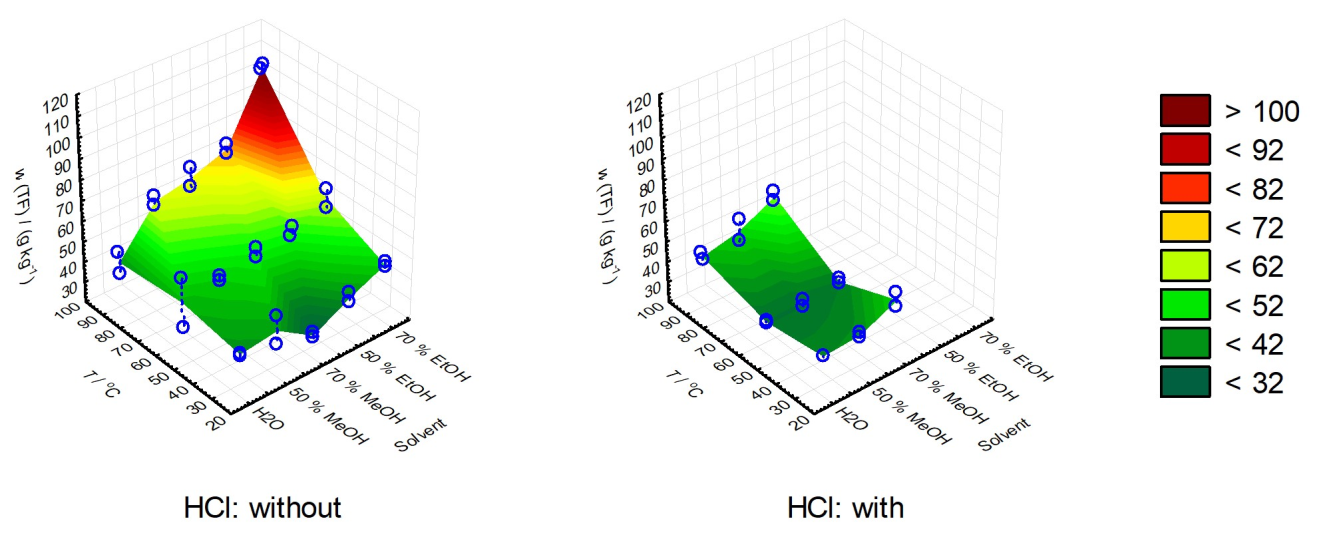
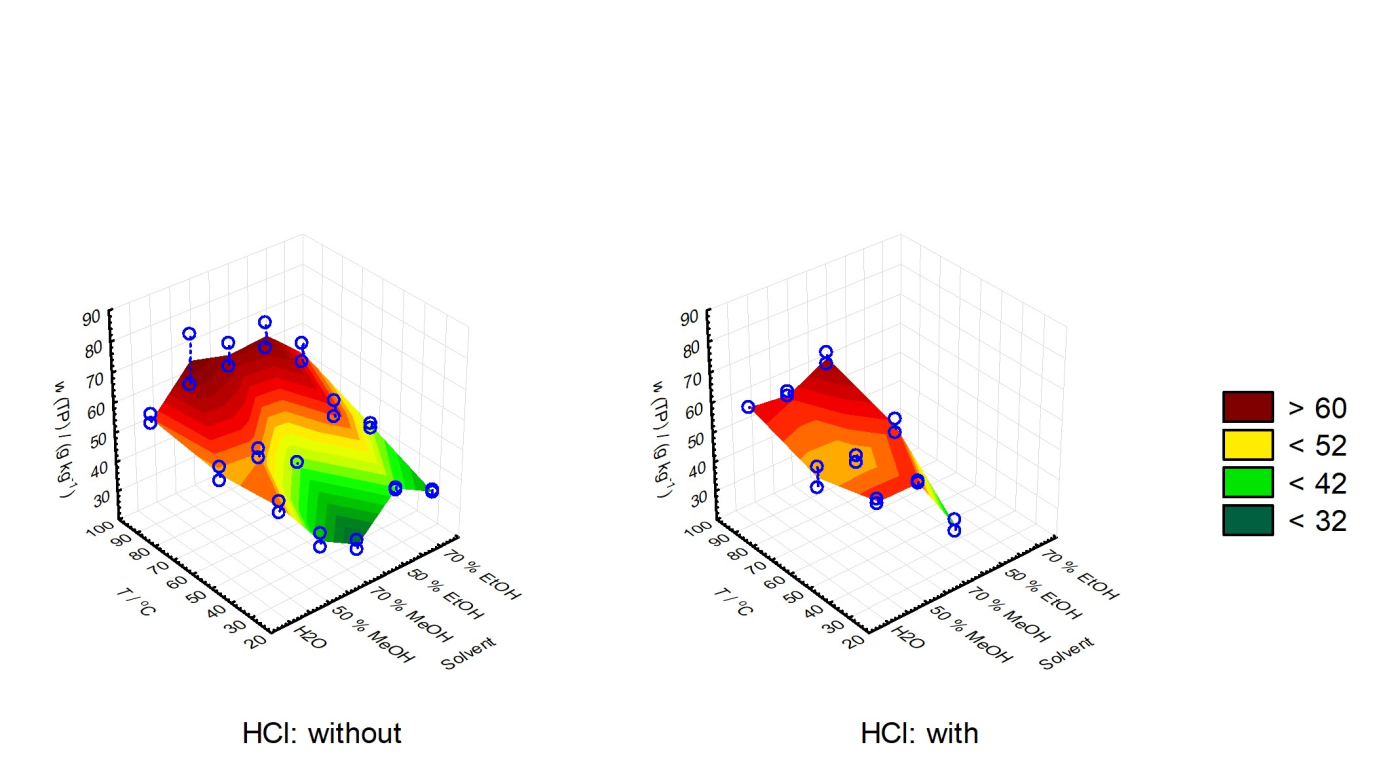
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**Figure S1.** Influence of temperature (25, 55 and 90 °C) and solvent (water, 1 % HCl, 50 and 70 % methanol with and without addition of 1 % HCl, and 50 and 70 % ethanol) on content of total phenols (TP) and total flavonoids (TF) extracted from tomato peel waste by MAE.

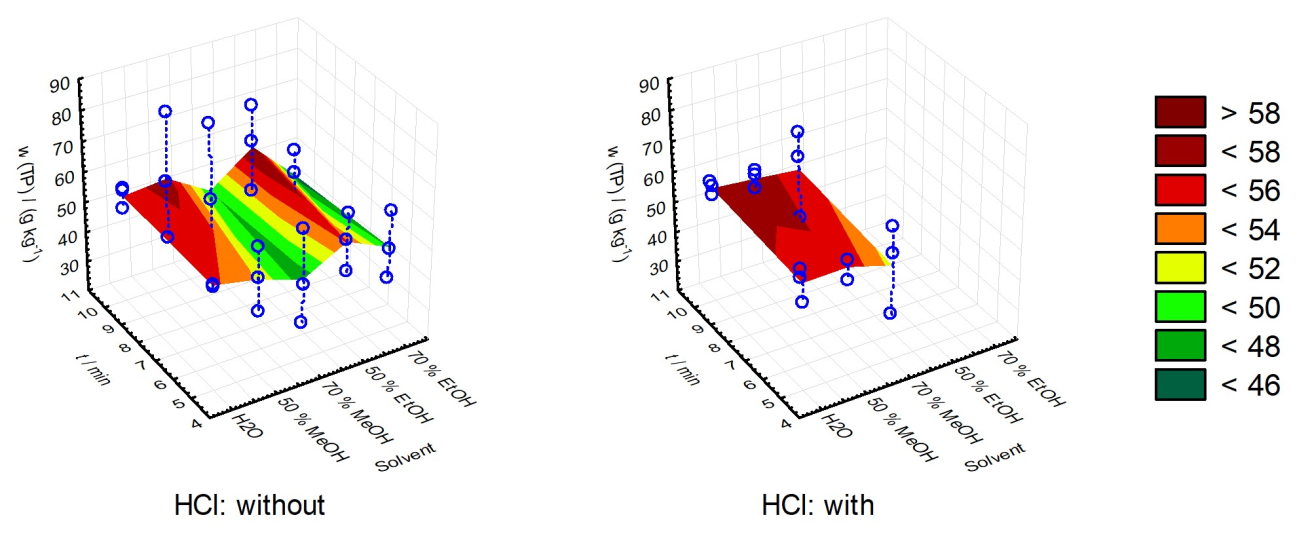


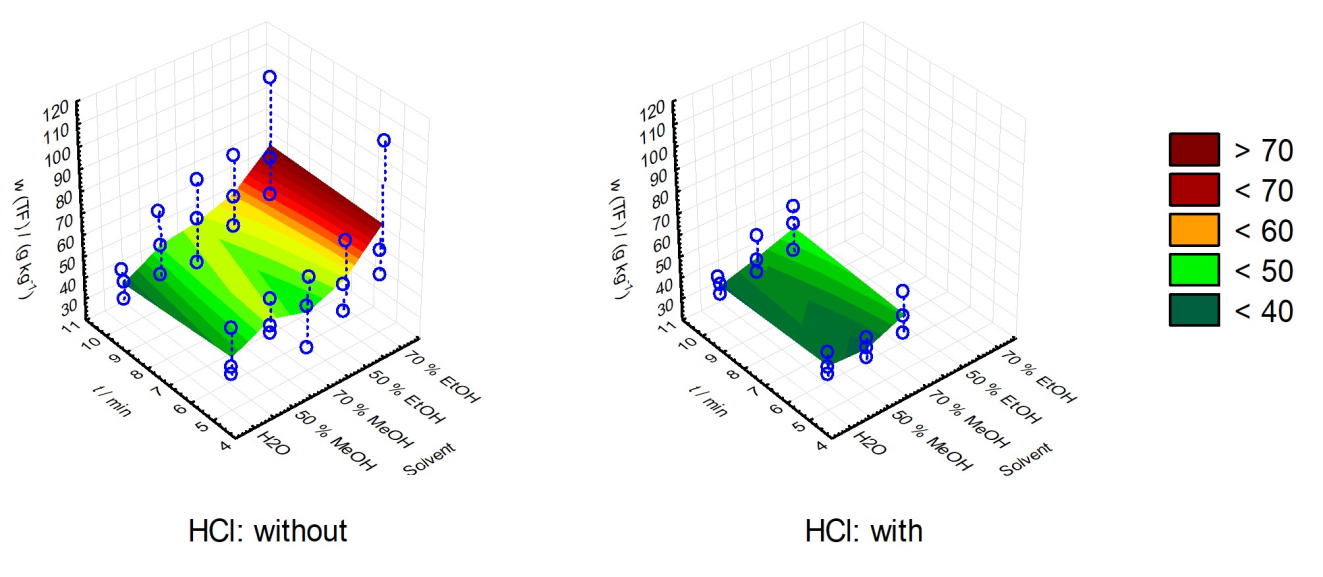
**Figure S2.** Influence of extraction time (5 and 10 min) and solvent (water, 1 % HCl, 50 and 70 % methanol with and without addition of 1 % HCl, and 50 and 70 % ethanol) on content of total phenols (TP) and total flavonoids (TF) extracted from tomato peel waste by MAE.

**a)**

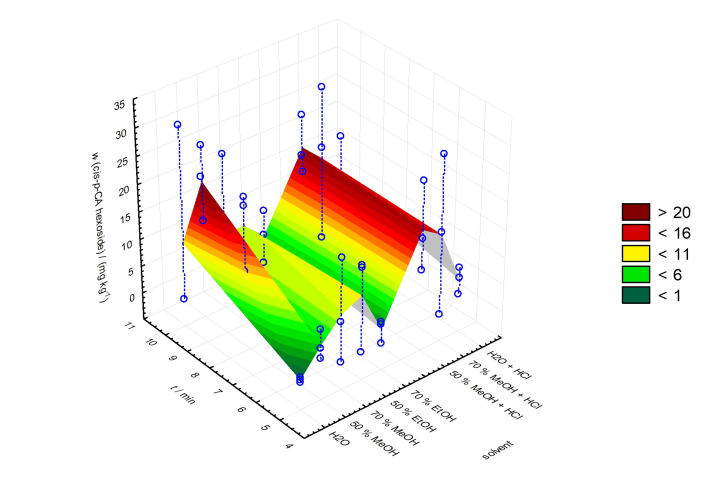
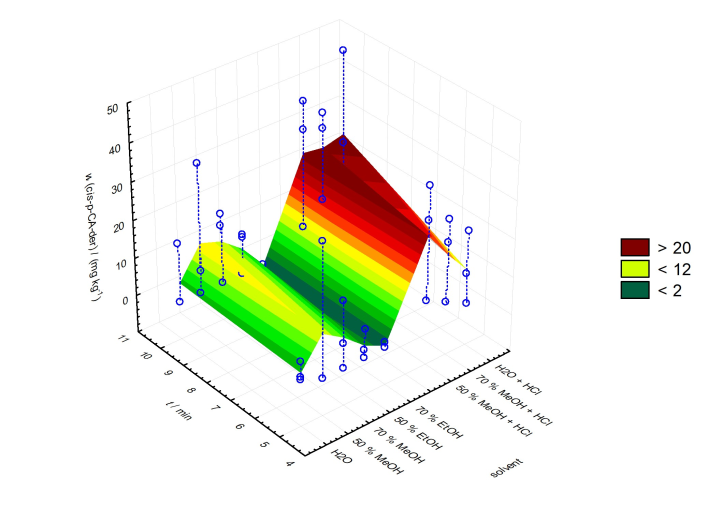
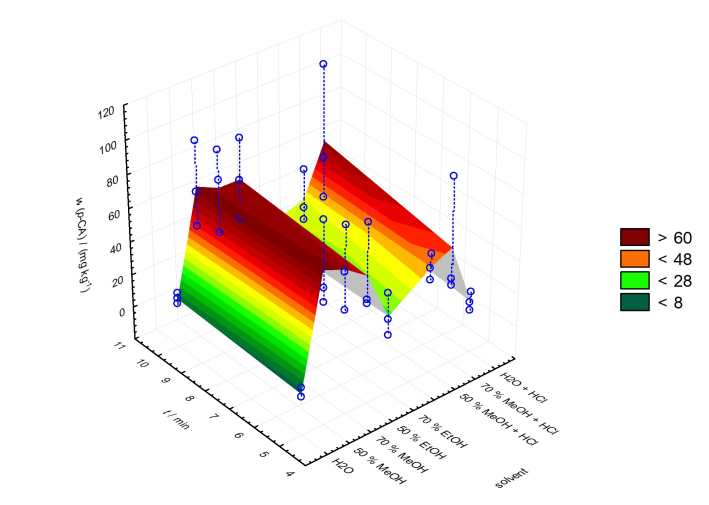


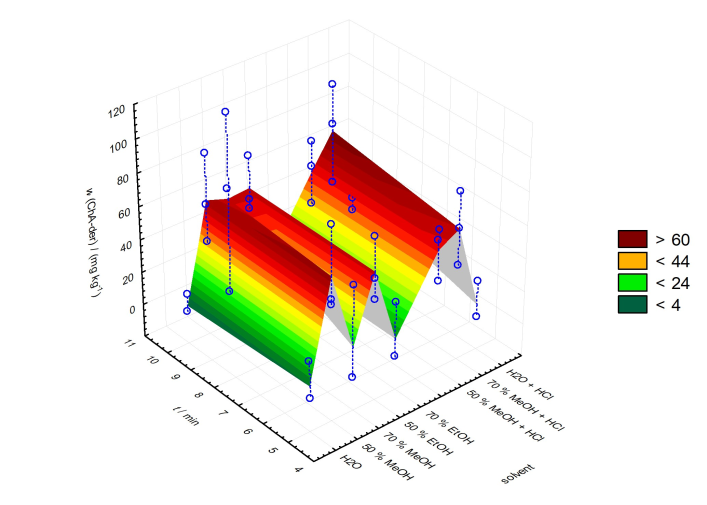
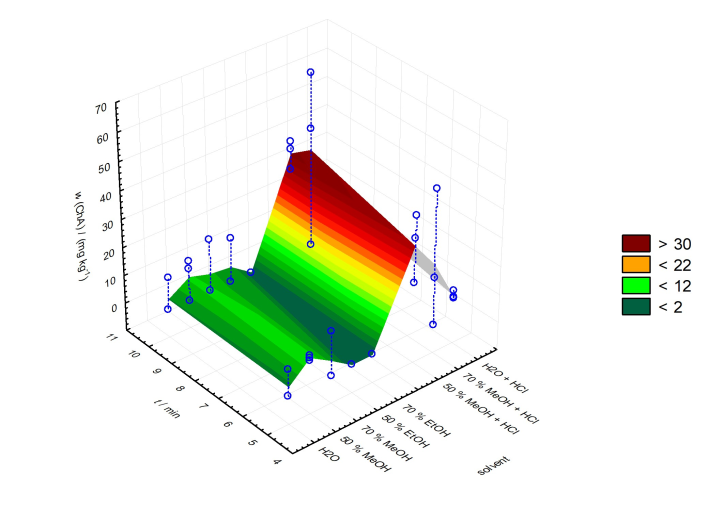
**b)**

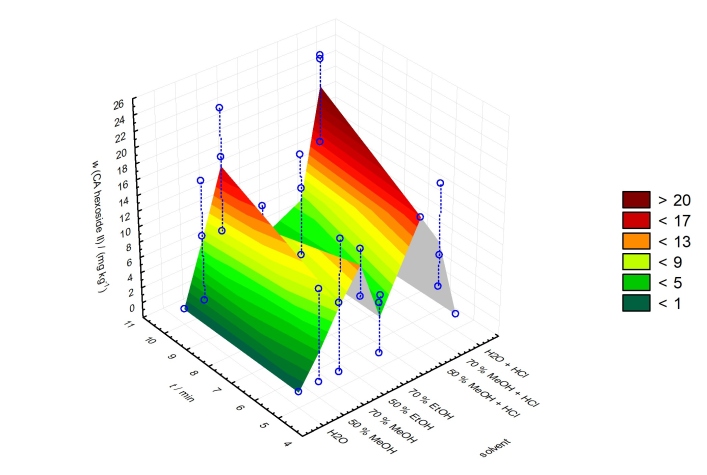
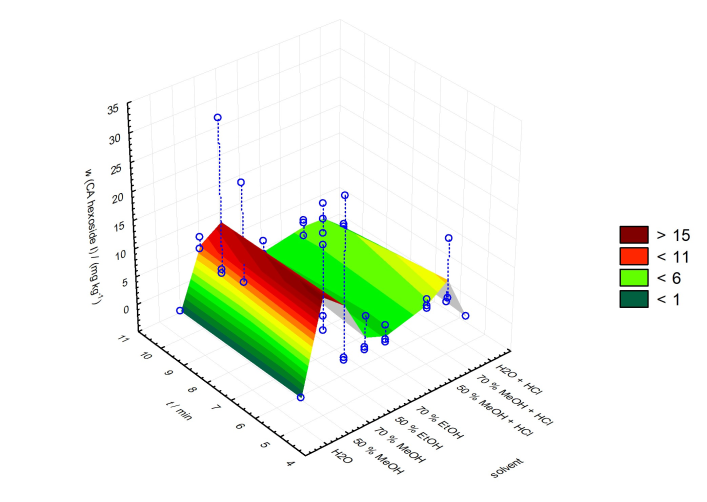


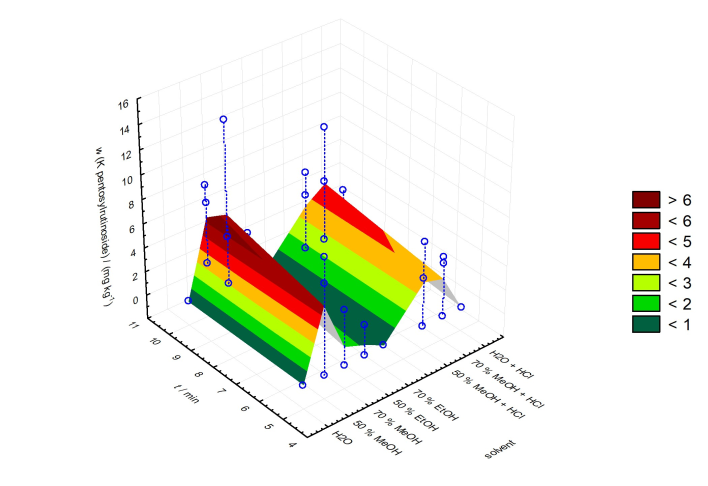
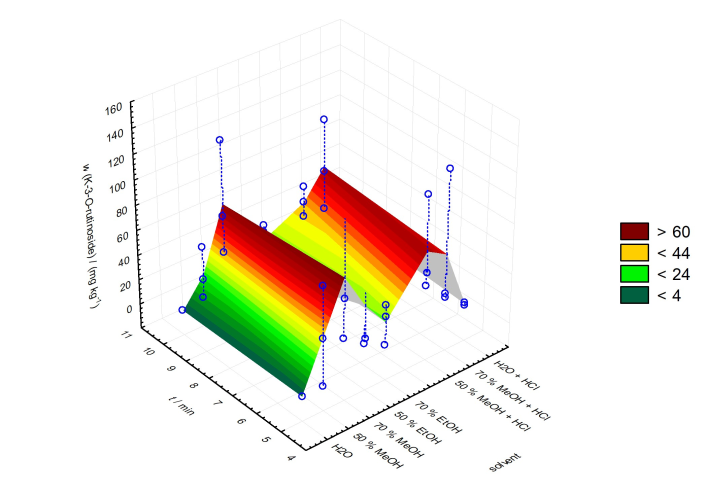


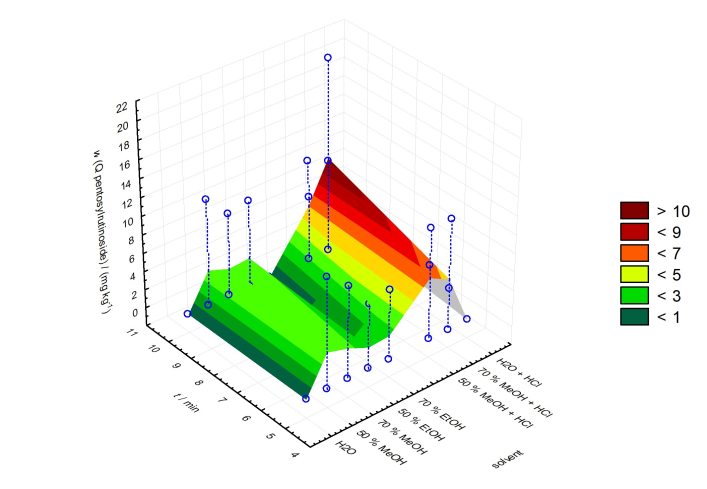
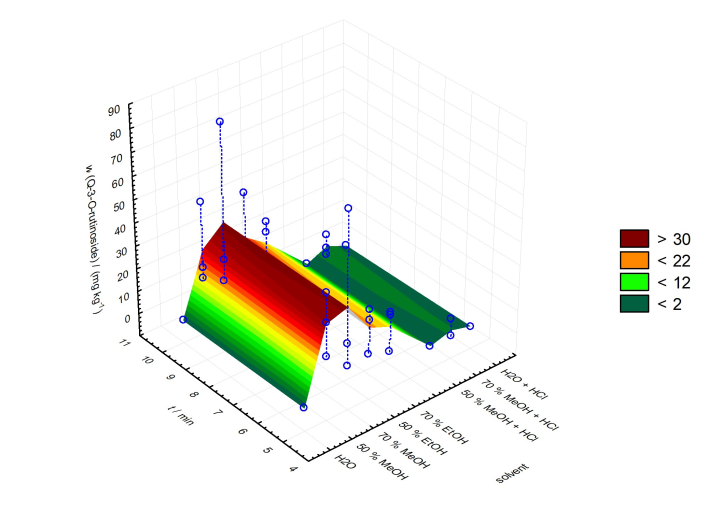
**Figure S3.** 3D categorized plots of influence of HCl addition to solvent (water, and 50 and 70 % methanol) or not vs: a) temperature (25, 55 and 90 °C) and b) time (5 and 10 min) on content of total phenols (TP) and total flavonoids (TF) extracted from tomato peel waste by MAE.











**Figure S4.** Influence of time (5 and 10 min) and solvent (water, 1 % HCl, 50 and 70 % methanol with and without addition of 1 % HCl and 50 and 70 % ethanol) on content of individual phenolic compounds extracted from tomato peel waste by MAE.